DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY OPERATING PERMIT

Permit No. AQ0231TVP02
Application No. 231
Minor Permit Revision 1: January 31, 2007

Issue Date: July 10, 2006
Expiration Date: July 9, 2011

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Trident Seafoods Corporation**, for the operation of the **Akutan Seafood Processing Facility**.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

As required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this operating permit.

Upon the effective date of this permit, the Permittee is no longer required to comply with the terms and conditions of Air Quality Control Permit to Operate No. 9325-AA001 or Air Quality Operating Permit No. 231TVP01 Revision 2.

All terms and conditions of Air Quality Construction Permit No. 9825-AC010 and Air Quality Construction Permit No. 231CP03 Revision 2 have been incorporated into this operating permit.

This operating permit becomes effective on August 10, 2006.

John F. Kuterbach, Manager
Air Permits Program

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List of Abbreviations Used in this Permit

AAC .....Alaska Administrative Code
ADEC.....Alaska Department of Environmental Conservation
AP-42 .....EPA report, Compilation of Air Pollutant Emission Factors
AS .....Alaska Statutes
ASTM .....American Society for Testing and Materials
bhp.....boiler horsepower
C.F.R. .....Code of Federal Regulations
dscf.....Dry standard cubic foot
EF .....Emission factor
EPA.....US Environmental Protection Agency
gr./dscf .....grain per dry standard cubic foot [1 pound = 7000 grains]
gpm .....gallons per month
gpy.....gallons per year
HAPs.....Hazardous Air Pollutants [*HAPs* as defined in AS 46.14.990(14)]
ID .....Emission Unit Identification Number
MMBtu/hr .....Million British Thermal Units per hour
MR&R.....Monitoring, recordkeeping, and reporting
NESHAPs .....Federal National Emission Standards for Hazardous Air Pollutants [*NESHAPs* as contained in 40 C.F.R. 61 and 63]
NOx.....Nitrogen Oxides
NSPS.....New Source Performance Standards [*NSPS* as contained in 40 C.F.R. 60]
O & M.....Operation and Maintenance
O_2 .....Oxygen
PM-10 .....Particulate Matter less than 10 microns in diameter
PPM .....Parts per million
ppmv, ppmvd .....Parts per million by volume on a dry basis
psia.....Pounds per Square Inch (absolute)
PSD .....Prevention of Significant Deterioration
RM .....Reference Method
S .....Sulfur
PTE .....Potential to Emit
SIC.....Standard Industrial Classification
SIP.....State Implementation Plan
SO_2.....Sulfur dioxide
TPY .....tons per year
TPM .....tons per month
VOC .....volatile organic compound [*VOC* as defined in 18 AAC 50.990(121)]
wt percent.....weight percent

Section 1. Identification

Names and Addresses:

Permittee:	**Trident Seafoods Corporation** 5303 Shilshole Ave., N.W. Seattle, WA 98107-4000
Stationary Source:	**Akutan Seafood Processing Facility**
Location:	54° 08′ North; 165° 47′ West
Physical Address:	Akutan Harbor Akutan Island, AK 99553
Owner:	Trident Seafoods Corporation 5303 Shilshole Ave., N.W. Seattle, WA 98107-4000
Operator:	Same as above
Responsible Official:	Mr. Earl R. Hubbard, Vice President of Regulatory Affairs Trident Seafoods Corporation 5303 Shilshole Ave., N.W. Seattle, WA 98107-4000 (206) 783-3818
Designated Agent:	Mr. Earl R. Hubbard, Vice President of Regulatory Affairs Trident Seafoods Corporation 5303 Shilshole Ave., N.W. Seattle, WA 98107-4000 (206) 783-3818
Building Contact:	Mr. Stephen M. Francis, Environmental, Health & Safety Manager Trident Seafoods Corporation Akutan Island, AK 99553 (907) 698-2211
Fee Contact:	Mr. Earl R. Hubbard, Vice President of Regulatory Affairs Trident Seafoods Corporation 5303 Shilshole Ave., N.W. Seattle, WA 98107-4000 (206) 783-3818

SIC Codes: 2091, 2092--Prepared Fresh or Frozen Fish and Seafoods

[18 AAC 50.326(a), 10/1/04] [40 C.F.R. 71.5(c)(1 & 2), 7/1/03]

Section 2. Fee Requirements

1. **Assessable Emissions.** The Permittee shall pay to the Department annual emission fees based on the stationary source's assessable emissions as determined by the Department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of:

   1.1 the stationary source's assessable potential to emit of 633.3 TPY; or

   1.2 the stationary source's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12 month period approved in writing by the Department, when demonstrated by:

      a. an enforceable test method described in 18 AAC 50.220;

      b. material balance calculations;

      c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or

      d. other methods and calculations approved by the Department.

   [18 AAC 50.346(b)(1), 8/25/04; 18 AAC 50.326(a), 10/1/04; and 18 AAC 50.410 – 50.420, 1/29/05]
   [40 C.F.R. 71.5(c)(3)(ii), 7/1/03]

2. **Assessable Emissions Estimates.** Emission fees will be assessed as follows:

   2.1 no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or

   2.2 if no estimate is received on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set out in condition 1.1.

   [18 AAC 50.346(b)(1), 5/3/02; 18 AAC 50.326(a), 10/1/04; and 18 AAC 50.410 – 50.420, 1/29/05]
   [40 C.F.R. 71.5(c)(3)(ii), 7/1/03]

Section 3. Emission Unit Inventory and Description

Emission units listed below have specific monitoring, recordkeeping, or reporting conditions in this permit. Emission unit descriptions and ratings are given for identification purposes only.

Table 1 – Existing Regulated Emission Unit Information

ID	Unit Name	Unit Description	Rating/Size	Install Date
1	Pollock Generator #4	Caterpillar Model D3516B Low NOx Diesel Electric Generator, SN 7RN00229	1,655 kW-e	5/1/94
2a	Cod Generator #1	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator, SN 8RM00273	1,360 kW-e	1/24/98 Mod 11/04
3a	Cod Generator #2	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator, SN 8RM00274	1,360 kW-e	1/24/98 Mod 11/04
4b	Pollock Generator #1	Caterpillar Model D3516B Quad Turbo Low NOx Diesel Electric Generator, SN 7RN01420	1,655 kW-e	12/03
5a	Pollock Generator #2	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator, SN 8RM00514	1,360 kW-e	6/15/00 Mod 11/04
6	Pollock Generator #3	Caterpillar Model D3512B Twin Turbo Low NOx Diesel Electric Generator, SN 8EM00253	1,240 kW-e	11/1/99
7a	Cod Generator #3	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator, SN 1GZ01229	1,135 kW-e	11/03
8	Pollock Boiler #1	Cleaver Brooks Model NCB 100-400 Steam Boiler, SN 85166	16.74 MMBtu/hr	1/15/90
9	Pollock Boiler #2	Cleaver Brooks Model NCB 100-400 Steam Boiler, SN 85165	16.74 MMBtu/hr	1/15/90
10	Cod Boiler #1	Johnston 516 AC Steam Boiler, SN 4756	5.11 MMBtu/hr	5/1/82
11	Cod Boiler #2	Johnston 516 AC Steam Boiler, SN 4757	5.11 MMBtu/hr	5/1/82
12	Fish Meal Drier	Pedar Halvorsen Furnace, SN 502511	34.6 MMBtu/hr	7/96
23a	Boiler	Cleaver Brooks Model 200-500-150 Steam Boiler, SN L62902	21 MMBtu/hr	2/22/05
24	Boiler	Falcon Boiler, SN M8616	1.02 MMBtu/hr	6/95
25	Sealand Engine	Detroit Diesel Series 60 Diesel Electric Generator, SN 06R0096733	350 kW-e	9/95
26	Compressor Engine	Caterpillar Model 3508B Twin Turbo Compressor Engine, SN 6PN00401	2.69 MMBtu/hr	1/24/98
27	Freshwater Pump House Generator	Caterpillar Model D3512A, Diesel Electric Generator, SN 24Z01359	1,135 kW-e	4/96
28	Cod Generator #4	Caterpillar Model D379, Diesel Electric Generator, SN 34Z00770	420 kW-e	6/82
29	Cod Generator #5	Caterpillar Model D379, Diesel Electric Generator, SN 34Z00771	420 kW-e	6/82
30	Trash Incinerator	Therm Tec Model G-50, SN 7916	750 lb trash/hr	2/02

ID	Unit Name	Unit Description	Rating/Size	Install Date
T1	Tank #1	Fish Oil Storage Tank	49,750 gallons	1991
T2	Tank #2	Diesel Storage Tank	372,320 gallons	1988
T3	Tank #3	Diesel Storage Tank	372,320 gallons	1988
T4	Tank #4	Diesel Storage Tank	372,320 gallons	1988
T5	Tank #5	Diesel Storage Tank	372,320 gallons	1988
T6	Tank #6	Diesel Storage Tank	216,000 gallons	1982

3. Modification Authorization. The Permittee may upgrade or replace Unit IDs 2, 3, 5, 6, 7a, 28, and 29 with 2a, 3a, 5a, 6a, 7b, 28a, and 29a respectively, as described in Table 2, in accordance with condition 23.5 and as follows:

3.1 Prior to installation of a new or modified unit, the Permittee shall remove the corresponding replaced unit from the stationary source.

3.2 The Permittee shall notify the Department's Fairbanks Office in writing within 7 days after initial start-up of each new or modified emission unit identifying the:

a. make and model,

b. unit ID,

c. serial number,

d. electronic fuel setting,

e. initial startup date,

f. installation date, and

g. removal date of replaced unit, if applicable.

3.3 After upgrading or replacing the existing units with the new or modified units, track the operating hours and fuel consumption for the new/modified units. Track these operational data separate from the replaced/modified units using the emission unit number designated in the permit. New/modified units are still subject to the limits applicable to replaced/modified units. Operational data shall be tracked in accordance with condition 16.1.

[Construction Permit No. 231CP03 Revision 2; condition 2, 12/5/05]

Table 2 – Modification Authorizations

ID	Unit Name	Unit Description	Rating/Size	Install Date
2a	Cod Generator #1	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator, SN 8RM00273	1360 Kw-e	1/24/98 Mod TBD

ID	Unit Name	Unit Description	Rating/Size	Install Date
3a	Cod Generator #2	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator, SN 8RM00274	1360 Kw-e	1/24/98 Mod TBD
5a	Pollock Generator #2	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator, SN 8RM00514	1360 KW-e	6/15/00 Mod TBD
6a	Pollock Generator #3	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator, SN 8EM00253	1,240 kW-e	11/1/99 Mod 5/26/05
7b	Cod Generator #3	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator, SN 1GZ01229	1,360 kW-e	11/03 Mod 6/3/05
28a	Cod Generator #4	Caterpillar Model D3516B Quad Turbo Low NOx Diesel Electric Generator, SN n/a	1,655 kW-e	TBD
29a	Cod Generator #5	Caterpillar Model D3516B Quad Turbo Low NOx Diesel Electric Generator, SN n/a	1,655 kW-e	TBD

4. Engine Installation Authorization. The Permittee may install Unit IDs 25a, 31, 32, 33 and 34, as described in Table 3, in accordance with condition 23.5 and as follows:

4.1 Prior to installation of a new or modified unit, the Permittee shall remove the corresponding replaced unit from the stationary source.

4.2 The Permittee may replace Unit IDs 25a, 31, and 32 with substitute units of like kind as set out in condition 4.3.

4.3 The Permittee shall provide to the Department's Fairbanks Office within 7 days after installation of Unit IDs 25a, 31 and 32 and any substitute unit, the emission rate information showing that the unit's emissions rate (lb per gallon and lb per hour) at 100 percent load is equal to or less than the emissions rates provided in the construction permit application for CO, NOx, SO2, and PM-10.

4.4 In addition to condition 4.3, the Permittee shall notify the Department's Fairbanks Office in writing within 7 days after installation of each new emission unit, identifying the:

a. make and model,

b. unit ID 1,

c. serial number,

d. electronic fuel setting,

e. anticipated initial start-up date,

f. installation date, and

g. removal date of replaced unit, if applicable.

4.5 After replacing the existing units with the new units, track the operating hours and fuel consumption for the new units. Track these operational data separate from the replaced units using the emission unit number designated in the permit. New units are still subject to the limits applicable to replaced units. Operational data shall be tracked in accordance with condition 16.1.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, condition 3, Revision 2, 12/5/05]

Table 3 – Engine Installation Authorizations

ID	Unit Name	Unit Description	Rating/Size	Install Date
25a	Portable Generator #1	'Portable' Diesel Electric Generator	350 kW-e[a]	TBD
31	Portable Generator #2	'Portable' Diesel Electric Generator	350 kW-e[a]	TBD

[1] For substitute unit ID, use the existing ID and add a letter starting with "a" (i.e. 31 replaced by 31a replaced by 31b etc.)

ID	Unit Name	Unit Description	Rating/Size	Install Date
32	Portable Generator #3	'Portable' Diesel Electric Generator	350 kW-e[a]	TBD
33	Cod Generator #6	Caterpillar Model D3516B Quad Turbo Low NOx Diesel Electric Generator, SN n/a	1,655 kW-e	TBD
34	Cod Generator #7	Caterpillar Model D3516B Quad Turbo Low NOx Diesel Electric Generator, SN n/a	1,655 kW-e	TBD

Table Note (a): The sizes for Unit IDs 25a, 31, and 32 may be three 350 kW-e (or less) generators, two 525 kW-e (or less) generators, or one 1,050 kW-e (or less) generator.

5. **Selective Catalytic Reduction (SCR) Installation Authorization.** The Permittee may install and operate SCR units listed in Table 4 as needed. The Permittee is authorized to install additional SCR units at their discretion.

[Construction Permit No. 231CP03 Revision2, condition 4, 12/5/05]

Table 4 – SCR Installation Authorizations

Unit ID[a]	SCR ID	SCR Name	SCR Description	Install Date
1	A	167249/32	SINOx System 2000	12/02
4b	B	167580/105	SINOx System 2000	6/03
2, 2a	C	167580/106	SINOx System 2000	6/03
5, 5a	D	167370/17	SINOx System 2000	9/04
3, 3a	E	167370/15	SINOx System 2000	9/04
6, 6a	F	167370/12	SINOx System 2000	10/04

Table Note (a): The emission unit in this column reflects the emissions unit/SCR ID configuration as of construction permit issuance. The Permittee is not restricted to the emissions unit/SCR ID configurations shown in this table.

Section 4. Emission Unit-Specific Requirements

Fuel Burning Equipment & Industrial Process Standards

6. **Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from fuel burning equipment and industrial processes to reduce visibility through the exhaust effluent by any of the following:

   a. More than 20 percent for more than three minutes in any one hour.[2]

   [18 AAC 50.055(a)(1), 1/18/97]
   [40 C.F.R. 52.70, 7/1/03]

   b. More than 20 percent averaged over any six consecutive minutes.[3]

   [18 AAC 50.055(a)(1), 5/3/02 & 18 AAC 50.346(c), 10/1/04]

   6.1 For Unit ID 24, monitor, record, and report according to Section 6.

   6.2 For Unit IDs 10, 11, 25, 27, 28, and 29, as long as actual emissions do not exceed 5 TPY CO, 2 TPY NOx, SO_2, and VOC, and 0.75 TPY PM-10, monitor, record, and report according to Section 6. If actual emissions exceed any of these thresholds, monitor, record, and report according to Section 12.

   6.3 For Unit IDs 1, 2a, 3a, 4b, 5a, 6a, 7b, 8, 9, 12, 23a, 25a, 26, 28a, 29a, and 31-34, monitor, record, and report according to Section 12, and in accordance with conditions 12.5 and 13.3f as applicable.

   [18 AAC 50.326(a), 10/1/04]
   [40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]

7. **Particulate Matter.** The Permittee shall not cause or allow particulate matter emitted from fuel burning equipment and industrial processes to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

   [18 AAC 50.055(b)(1), 1/18/97 & 18 AAC 50.346(c), 10/1/04]

   7.1 For Unit ID 24, monitor, record, and report according to Section 6.

   7.2 For Unit IDs 10, 11, 25, 27, 28, and 29, as long as actual emissions do not exceed 5 TPY CO, 2 TPY NOx, SO_2, and VOC, and 0.75 TPY PM-10, monitor, record, and report according to Section 6. If emissions exceed any of these thresholds, monitor, record, and report according to Section 12.

   7.3 For Unit IDs 1, 2a, 3a, 4b, 5a, 6a, 7b, 8, 9, 12, 23a, 25a, 26, 28a, 29a, and 31-34, monitor, record, and report according to Section 12.

   [18 AAC 50.326(a), 10/1/04]
   [40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
   Construction Permit No. 231CP03 Revision2, 12/5/05]

[2] For purposes of this permit, the "more than three minutes in any one hour" criterion in this condition and condition 26 will no longer be effective when the revisions to 18 AAC 50 dated 5/3/02 are adopted by EPA.
[3] The six-minute average standard is enforceable only by the state until the revisions to 18 AAC 50 dated 5/3/02 are adopted into the State Implementation Plan (SIP), at which time it will also be federally enforceable.

8. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from fuel burning equipment and industrial processes to exceed 500 PPM averaged over three hours.

[18 AAC 50.055(c), 1/18/97 & 18 AAC 50.346(c), 10/1/04]

8.1 Limit the sulfur content of the fuel as set out by conditions 23.2 and 23.5.

8.2 Monitor, record and report according to conditions 12 and 23.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(1 & 3), 7/1/03]

Incinerator Standards

9. Incinerator Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, through the exhaust of Unit ID 30, to reduce visibility by any of the following:

a. more than 20 percent for a total of more than three minutes in any one hour[4];

[18 AAC 50.050(a)(2), 1/18/97]
[40 C.F.R. 52.70, 7/1/03]

b. more than 20 percent averaged over any six consecutive minutes[5].

[18 AAC 50.050(a), 5/03/02 & 18 AAC 50.346(c), 10/1/04]

9.2 Monitor, record and report according to Section 12.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]

New Source Performance Standards

10. Standards of Performance for Commercial and Industrial Solid Waste Incinerators. For Unit ID 30, keep records on a calendar quarter basis of the weight of municipal solid waste burned (or other EPA approved method) and the weight of all other fuels and wastes burned in the unit to be exempt from this subpart.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[40 C.F.R. 60 Subpart CCCC, 7/1/03]

National Emission Standards for Hazardous Air Pollutants

11. National Emission Standard for Mercury. Do not exceed 3.2 kilograms of mercury emissions per 24-hour period from Unit ID 30.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[40 C.F.R. 61 Subpart E, 7/1/03]

[4] See Footnote 2.
[5] See Footnote 3.

Used Oil Authorization

12. Used Oil Authorization.[6] The Permittee may burn used oil blends in heaters and boilers as follows:

12.1 Analyze each batch of used oil to determine the sulfur content using an approved ASTM method such as ASTM D 129, 1266, 1552, 2622, 3120, 4045, or 4294. Maintain records showing the results of each analysis.

12.2 Blend the used oil with virgin oil (fuel oil or fish oil) using a metering system or other reproducible method accurate to plus or minus two percent. Blend at a ratio:

a. that will ensure compliance with the fuel sulfur requirements in conditions 23.2 and 23.5; and

b. that will ensure compliance with the particulate matter standard listed in condition 7, consisting of one gallon of used oil to at least six gallons of virgin oil.

12.3 Record the blend date, the quantity of used oil blended, the quantity of virgin oil (fuel oil or fish oil) blended, the blend ratio, and the final sulfur content of the blend.

12.4 Account for the consumption of the used oil blend as set out according to condition 16.1b.

12.5 Within 90 operating days of first use under this permit, conduct a one-time Method 9 observation for each boiler or heater that burns used oil blends in accordance with the procedures in Section 12 and Section 13.

12.6 Include in the Operating Report required by condition 53:

a. results of each analysis as set out by condition 12.1;

b. results of each Method 9 observation, clearly indicating the use of used oil blends; and

c. for each batch of used oil blended, the blend date, the quantity of used oil blended, the quantity of virgin oil (fuel oil or fish oil) blended, the blend ratio, and the final blended sulfur content.

[6] CAUTION! Although this condition should ensure compliance with the applicable emission standards of 18 AAC 50, this permit condition does NOT ensure compliance with other applicable state or federal laws concerning management, use, or disposal of used oil.

12.7 Report as set out by condition 52 any time the blend ratio or other requirements deviate from this condition 12.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, Revision 2, condition 5, 12/5/05]

Fish Oil Authorization

13. Fish Oil Engine Authorization. The Permittee may burn blended fish oil/fuel oil blends in each engine upon Department approval as set out below:

13.1 To obtain Department approval for burning fuel oil/fish oil blends, conduct NOx emission source testing using procedures set out in Section 8 within 10 operating days after initial conversion to blended fish oil/fuel oil and as follows:

a. Test each unit at no less than three loads (high, mid, and low) within the normal operating range of the unit. If the Permittee proves, or has previously demonstrated to ADEC's satisfaction, that units have identical configuration, the Department will allow one unit to be tested within that group.

b. During each test, monitor and record opacity in accordance with Section 12 and Section 13.

c. At each load, test at the desired fish oil/fuel oil blend(s) and at 100 percent diesel fuel.

d. During each test, monitor and record the unit's average load, electric generation rate, and blended fuel consumption rate.

e. Determine the fuel-specific higher heating value (gross heat value) and specific gravity for each fuel or fuel blend used during the testing by obtaining a vendor certification or by analyzing a representative sample of the fuel or blend using an approved ASTM method such as ASTM D 240, 1298, 4052, or 4809.

f. Determine the load-specific NOx emission factors (lb per gallon and lb per hour) expressed as NO2, based on Method 19.

g. Include the information obtained in conditions 13.1b through 13.1f in the source test report required in Section 8.

13.2 Obtain Department approval in writing before using fuel oil/fish oil blends in any emission unit equipped with SCR. To obtain approval, submit to the Department's Fairbanks Office a SCR vendor demonstration that the fish oil/fuel oil blend will not cause or contribute to an accelerated decrease of SCR performance, including:

a. compatibility information of SCR reagent and fish oil;

b. estimated emission reduction compared to diesel fuel;

c. recommended changes of dosing and concentration of reagent in SCR (remapped to engine if needed); and

d. recommended increase in SCR maintenance and inspection intervals.

13.3 When burning fish oil/fuel oil blends:

a. Analyze the fish oil once every 60 months, starting within 10 operating days of first use, to determine the sulfur content using an approved ASTM method such as ASTM D 129, 1266, 1552, 2622, 3120, 4045, or 4294. Maintain records showing the results of each analysis.

b. Blend the fish oil with fuel oil using a metering system or other reproducible method accurate to plus or minus five percent. Blend at a ratio:

(i) not to exceed that for which the stationary source has conducted emission source tests under condition 13.1 to verify site-specific NOx emission factors; and

(ii) that will ensure compliance with the fuel sulfur requirements in condition 23.2 and 23.5.

c. Record the blend date, the quantity of fish oil blended, the quantity of fuel oil blended, and the blend ratio.

d. Account for the consumption of the fish oil/fuel oil blends according to condition 16.1b.

e. Use the Department approved blended fish oil/fuel oil emission factors pursuant to condition 13.1 to calculate the NOx emissions according to condition 16 during any period during which the unit combusts blended fish oil/fuel oil, retroactive to its first use. Submit an updated Operating Report to the Department's Fairbanks Office within 30 days after approval if necessary to correct NOx emissions previously submitted to the Department.

f. Within 90 operating days of first use, conduct a one-time Method 9 observation for each engine that burns fish oil blends in accordance with the procedures in Section 12 and Section 13.

13.4 Include in the Operating Report required by condition 53:

a. results of each analysis as set out by condition 13.3a;

b. results of each Method 9 observation, clearly indicating the use of fish oil blends; and

c. for each batch blended, the blend date, the quantity of fish oil blended, the quantity of fuel oil blended, and the blend ratio.

13.5 Report as set out by condition 52 any time the blend ratio or other requirements deviate from this condition 13.

[18 AAC 50.326(a), 10/1/04]

[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, Revision 2, condition 6, 12/5/05]

Fish Meal Plant Requirements

14. The Permittee shall operate the seawater scrubber at all times when the fish meal plant is operating.

14.1 Record and report the hours of operation and fuel consumption for the fish meal dryer (Unit ID 12) as set out in conditions 16.1b, 16.1c, and 16.8.

14.2 Physically verify and record that the seawater pumps are operating prior to startup of the fishmeal plant dryer (Unit ID 12) and at least once each work shift that the fish meal plant is operated.

14.3 Report as set out by condition 52 and in the Operating Report as set out by condition 53, occurrences when the fish meal plant operated while the scrubber was down.

[Permit to Operate No. 9325-AA001, 6/26/95]
[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]

Section 5. Stationary Source-Wide Requirements

Environmental Management System

15. Environmental Management System. Operate the stationary source in accordance with air quality control provisions of the Department-approved Environmental Management System (EMS).

15.1 Update the EMS to include management of new and revised air quality control obligations as set out in this permit and submit to the Department's Fairbanks Office within 60 days after permit issuance.

15.2 Update the EMS to include management of new and revised air quality control obligations and submit to the Department's Fairbanks Office within 60 days after any Department issued air quality permit.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, Revision 2, condition 7, 12/5/05]

Owner Requested Limits to Avoid Classification as PSD-Major

16. Limit to Avoid Classification as PSD-Major for NOx. The Permittee shall limit the stationary source's NOx emissions to no more than 240 tons in any twelve consecutive months. Trident may use aqueous urea-based Selective Catalytic Reduction (SCR) as described in condition 17 to actively reduce NOx emissions in addition to operational restrictions as listed. Monitor, record, and report as follows:

16.1 Fuel Consumption (Fuel Oil, Fish Oil, and Used Oil) and Operating Hour Monitoring.

a. Install and operate a dedicated continuous monitoring system for recording fuel consumption that is accurate to within two percent on each of Unit IDs 1 through 12, and 23 through 34, including replacement units, listed in Table 1, Table 2, and Table 3.

b. Monitor and record the monthly and SCR interval fuel consumption for each unit. The SCR interval is any period between the SCR effectiveness tests while operating with SCR as determined in condition 17.3.

c. Monitor and record monthly and SCR interval operating hours for each unit.

d. For any period during which the fuel consumption monitoring system is out-of-bounds or not operational, then for purposes of calculating NOx emission in condition 16.2c(ii), determine the monthly or SCR interval fuel consumption based on the hours recorded in condition 16.1c, and the design fuel consumption rate in Section 14.

16.2 Engine Load Requirements.

a. When operating in low emissions mode, limit Unit ID 26 to loads no greater than 79 percent by limiting the monthly fuel consumption rate to 62.6 gallons

per hour. When operating in fuel economy mode, limit Unit ID 26 to loads no greater than 67 percent by limiting the monthly fuel consumption rate to 48.2 gallons per hour. Calculate and record monthly fuel consumption rate by dividing the total fuel consumed in the month as determined by condition 16.1b by the total hours of operation for the month as determined by condition 16.1c.

b. For all engines not equipped with SCR, calculate the monthly fuel consumption rate by dividing the monthly fuel consumption as determined by condition 16.1b by the hours operated in the month as determined by condition 16.1c. Then, calculate and record the monthly percent load by dividing the monthly fuel consumption rate by the design fuel consumption rate listed in Section 14 and multiplying by 100.

c. For engines equipped with SCR:

(i) Calculate the SCR interval fuel consumption rate by dividing the SCR interval fuel consumption by the hours operated during the interval. Then, calculate and record the SCR interval percent load by dividing the SCR fuel consumption rate by the design fuel consumption rate listed in Section 14 and multiplying by 100.

(ii) Calculate the fuel consumption rate for the remainder of the month by dividing the monthly uncontrolled fuel consumption as determined by condition 16.1b by the hours operated in the month without SCR as determined by condition 16.1c. Then calculate and record the percent load for the remainder of the month by dividing the fuel consumption rate for the uncontrolled period by the design fuel consumption rate listed in Section 14 and multiplying by 100.

16.3 By the 15th of each month, calculate the previous month's total NOx emissions as follows:

a. Engines.

(i) For each engine that did not use SCR for any part of the month, calculate and record the monthly NOx emissions using Equation 1; as an alternative, for any specific engine, use the PTE for the engine listed in Section 14 as monthly NOx emissions.

Equation 1 $$NOx = TC \times EF \times \frac{1\,ton}{2000\,lb}$$

Where: NOx = NOx emissions (tons per month);

TC = Fuel consumption (gallons per month) for each unit that did not use SCR during the month, measured or calculated in accordance with condition 16.1b; and

EF = NOx uncontrolled emission factor (lb per gallon) from Section 14, based on the monthly average load recorded

under condition 16.2b for each unit, except as indicated in condition 13.3e for fish oil combustion.

(ii) For each engine that did use SCR for any part of the month, calculate and record emissions using conditions 16.3a(ii)(A) and 16.3a(ii)(B); as an alternative, for any specific engine, use the PTE for the engine listed in Section 14 as monthly NOx emissions.

(A) Calculate the monthly NOx emissions while using SCR, for each interval using Equation 2.

Equation 2 $$NOx = \left[\sum_{i=1}^{n}(ineff_i \times CC_i) \times EF_i\right] \times \frac{1\,ton}{2000\,lb}$$

Where: NOx = NOx emissions (tons per month);

n = Number of intervals during the month for which a given engine used SCR;

CC = Controlled fuel consumption (gallons per each interval i), measured or calculated in accordance with condition 16.1b);

ineff = The SCR ineffectiveness (percent) for interval i, calculated by taking 100 minus the effectiveness calculated in accordance with condition 17.3; and

EF = NOx uncontrolled emission factor (lb per gallon) from Section 14 based on the load recorded under condition 16.2c(i) for interval i, except as indicated in condition 13.3e for fish oil combustion.

(B) Calculate the monthly NOx emissions while not using SCR using Equation 3.

Equation 3 $$NOx = UC \times EF \times \frac{1\,ton}{2000\,lb}$$

Where: NOx = NOx emissions (tons per month);

UC = Uncontrolled fuel consumption (gallons per month) for each engine (UC = TC – (CC1 + CC2, etc), TC and CC measured or calculated in accordance with condition 16.1b;

EF = NOx uncontrolled emission factor (lb per gallon) from Section 14 based on the load recorded under condition 16.2c(ii) for each unit, except as indicated in condition 13.3e for fish oil combustion.

b. Non-Engines (except Unit ID 30). For each non-engine except Unit ID 30, calculate and record the NOx emissions using Equation 4; as an alternative, for any specific unit, use the PTE for the unit listed in Section 14 as monthly NOx emissions.

Equation 4 $$NOx = TC \times EF \times \frac{1\,ton}{2000\,lb}$$

Where: NOx = NOx emissions (tons per month);

TC = Fuel consumption (gallons per month), measured or calculated in accordance with condition 16.1b; and

EF = NOx uncontrolled emission factor (lb per gallon) from Section 14. Note that load does not affect the emission factors from non engines.

c. Incinerator Unit ID 30. Charge no greater than 146 tons of refuse each month (equivalent to 400 lb per hour continuous capacity). Monitor, record, and report as follows:

(i) Weigh and record weight of each batch of waste charged in Unit ID 30. Calculate and record the total quantity of waste burned each month in tons.

(ii) Calculate and record actual NOx emissions from Unit ID 30 using Equation 5; as an alternative, use a PTE of 1.4 tons per month for the incinerator.

Equation 5 $$NOx = \left[(TC \times 0.2) + (TW \times 2.6)\right] \times \frac{1\,ton}{2000\,lb}$$

Where: NOx = NOx emissions (tons per month) for Unit ID 30;

TC = Fuel consumption (gallons per month), measured or calculated in accordance with condition 16.1b;

0.2 = Diesel fuel combustion emission factor (lb per gallon);

TW = monthly waste incinerated (tons); and

2.6 = waste combustion emission factor (lb per ton).

16.4 By the 15th of each month, add the monthly NOx emission for all units calculated under condition 16.3 to obtain the stationary source monthly total. Add the monthly stationary source total to the stationary source total for the previous 11 months to determine the 12 consecutive month total for the stationary source.

16.5 If the NOx emissions calculated under condition 16.4 exceed 235 tons per 12 consecutive months, conduct a NOx emission source test on each internal combustion engine, except for Unit IDs 25, 25a, 27 through 29, 31, and 32 and substitute units (the portable and backup units), within 90 days, unless a source test has been conducted within the previous 12 months. Conduct the tests at no less than three loads within the normal operating range of the emission unit using procedures set out in Section 8, and as follows.

a. For units equipped with SCR, simultaneously conduct the test upstream and downstream of the SCR unit.

(i) For each run, conduct a simultaneous instrument accuracy verification test using the Engine Exhaust NOx Analyzer described in condition 18 to collect one representative sample. Obtain readings from directly upstream and directly downstream of the SCR according to regular operational procedures in conditions 18.2, 18.3b, and the most recent Department-approved Quality Assurance/Quality Control (QA/QC) Plan.

(ii) For each test, determine the load curve, the urea reagent concentration, the urea flow rate, and the ammonia slip.

b. During each test, monitor and record the unit's average load, electric generation rate, and fuel consumption rate.

c. Determine the fuel-specific higher heating value (gross heat value) and the specific gravity by obtaining a vendor certification or by analyzing a representative sample of the fuel using an approved ASTM method such as ASTM D 240, 1298, 4052, or 4809.

d. Determine the load-specific NOx emission rate (lb per gallon and lb per hour), based on Method 19.

e. Include the information obtained in conditions 16.5a through 16.5d in the source test report required by Section 8.

16.6 After Department approval of the source tests conducted under condition 16.5 or any other Department approved source test, use the source test emission factors to calculate the unit's emissions in condition 16.3. If the emission factor in lb per gallon for any given load differs from the values listed in Section 14, recalculate the 12 consecutive month total emissions, starting six months prior to the source test, and submit an updated Operating Report for those periods to the Department's Fairbanks Office within 30 days after approval.

16.7 Report as set out by condition 52 any time the NOx emissions calculated under condition 16.4 or 16.6 exceeds 240 tons per 12 consecutive months or any time the monitoring, recording, or reporting deviates from condition 16.

16.8 Include in the Operating Report required by condition 53:

a. the monthly total fuel use and operating hours for each unit as set out under condition 16.1b or 16.1d;

b. the engine loads (monthly average, SCR interval) recorded under condition 16.2;

c. the monthly total waste incinerated recorded under condition 16.3c(ii); and

d. the monthly and 12 consecutive month total NOx emissions for the stationary source under condition 16.4 or 16.6.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, Revision 2, condition 8, 12/5/05]

17. Selective Catalytic Reduction (SCR) Requirements. For each SCR system, install and operate SCR units in accordance with the most recent Department-approved SCR Operating System QA/QC Plan, and as follows:

17.1 Maintain on-site a spare catalyst bed in new condition for each group of compatible SCR units. If the spare catalyst bed is compatible with all SCR units, the Permittee may maintain on-site only one catalyst bed in new condition for all units.

17.2 Maintain on-site necessary vendor-recommended spare parts (spray nozzles, lance, pumps, seals, and solenoids).

17.3 SCR NOx Removal Effectiveness. Determine SCR effectiveness for each interval[7] of SCR use as follows.

a. Measure total parts per million (PPM) nitrogen oxide (NO) concentration of exhaust stream before and after SCR treatment using a gas analyzer that meets the performance specifications set out in condition 18.

b. Calculate nitrogen dioxide (NO_2) concentration of exhaust stream both before and after the SCR unit as five percent of the total NOx in the exhaust stream as shown in Equation 6.

c. Calculate the total NOx of exhaust stream both before and after the SCR unit by summing the measured NO concentration and the calculated NO_2 concentration as shown in Equation 7.

d. Calculate the effectiveness using Equation 8, upon initiating a period of SCR controlled operations for a specific engine; and, except as indicated in condition 17.3e, at least every 7 operating days for the duration of continuous SCR emission controls of that engine.

[7] An SCR interval is any period between the SCR effectiveness tests while the unit is operating with SCR.

Equation 6 $NO_2 = NO\left(0.05/0.95\right)$

Equation 7 $NO_X = NO + NO_2$

Equation 8 $eff = \frac{NO_X(in) - NO_X(out)}{NO_X(in)} \times 100$

Where: eff = SCR effectiveness (percent);

NOx_{in} = NOx concentration (PPM) before SCR; and

NOx_{out} = NOx concentration (PPM) after SCR.

e. If the NOx emissions calculated under condition 16.4 exceed 230 tons per 12 consecutive months, measure SCR effectiveness daily starting on the 15th of the month following the month that resulted in greater than 230 tons of NOx emissions, and continuing until the 12 consecutive month NOx emissions are shown to be below 230 tons per 12 consecutive months.

f. Record the effectiveness for each SCR interval. The effectiveness for each interval is the lowest effectiveness measured for the tests that bound that interval. For instance, interval 1 is bounded by 80 percent and 85 percent. The effectiveness for interval 1 is 80 percent.

17.4 In case of SCR malfunction, contact the SCR vendor or certified technician and implement their prescribed corrective actions, and record:

a. a complete description of the corrective action;

b. the date the corrective action was completed;

c. the technician's contact information (if the corrective action was prescribed by an SCR manufacturer or certified technician); and

d. if applicable, a description of how any corrective actions completed differed from what was prescribed by the SCR manufacturer or certified technician, and the basis for the difference.

17.5 Keep records of:

a. all SCR system repairs, maintenance, and SCR control system adjustments, including time and date;

b. the dates and times each time that SCR controls are started up and shut down. Start-up means that the catalyst bed temperature is within the manufacturer's recommended temperature set points for optimal NOx removal and reagent injection is at a rate consistent with the programmable logic controller setting for the operating engine's load setting. Shut down means that the engine is no longer running or one of the above parameters is out of bounds;

c. hourly records of injection rate of SCR reagent in gal/hr and records of the concentration of SCR reagent in lb per gallon for each batch prepared;

d. receipts for all urea purchases (with dates and quantities);

e. system alarm logs including time, date of occurrence; and

f. date and time of every effectiveness test conducted under condition 17.3, and results.

17.6 Include in the Operating Report required by condition 53, all records required under condition 17, except for the records required under condition 17.5c. Maintain the records required under condition 17.5c on-site for 5 years from the date of the record.

17.7 Report as set out by condition 52 any time the monitoring, recording, or reporting deviates from this condition 17.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, Revision 2, condition 9, 12/5/05]

18. Engine Exhaust NOx Analyzer. The Permittee shall maintain two (primary and secondary) exhaust gas NOx analyzers onsite that are capable of measuring NO concentrations of one to 1,000 ppmv and that are accurate to five percent in accordance with the most recent Department-approved NOx Monitoring System QA/QC Plan. Comply with the following for analyzers required under this condition:

18.1 Install on the stacks of units capable of operating with SCR:

a. sampling ports that comport with 40 C.F.R. 60, Appendix A, Method 1, Section 2.1, and a stack or duct free of cyclonic flow at the port location during the applicable test methods and procedures;

b. safe sampling platforms;

c. safe access to sampling platforms; and

d. utilities for emission sampling and testing equipment.

18.2 Develop an analyzer exhaust traverse for each sampling port of no less than three points to ensure representative sampling.

18.3 Analyzer Relative Accuracy Requirements.

a. Keep calibration gas available onsite at all times.

b. Before each SCR effectiveness test required by condition 17.3, test the analyzer's relative accuracy using NOx calibration gas as follows:

(i) Measure and record the:

(A) date;

(B) certified NOx concentration of the calibration gas (NOx certified); and

(C) measured NOx concentration of the calibration gas (NOx measured).

(ii) Calculate and record the analyzer relative accuracy using Equation 9.

Equation 9 $$RA = \left| \frac{NO_{x certified} - NO_{x measured}}{NO_{x certified}} \right| \times 100$$

Where: RA = Analyzer Relative Accuracy

c. Recalibrate or repair the analyzer if relative accuracy exceeds five percent, and no less than once each year. The recalibration must be performed by the manufacturer or a trained technician.

d. When the primary analyzer requires recalibrations or repairs under condition 18.3c, use the secondary analyzer for all measurements required under this permit. Follow all requirements listed in condition 18.3.

e. Keep records of each relative accuracy test. Notify the Department's Fairbanks Office in writing within 7 days of the audit date if any analyzer's relative accuracy calculation conducted under condition 18.3b results in a relative accuracy greater than five percent.

18.4 Include with the Operating Report required under condition 53:

a. a copy of the receipt for any recalibration following return of the recalibrated analyzer required under condition 18.3c; and

b. a copy of any records and notifications required under condition 18.3e.

18.5 Report as set out by condition 52 any time the monitoring, recording, or reporting deviates from this condition 18.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, Revision 2, condition 10, 12/5/05]

19. Limit to Avoid Classification as PSD-Major for SO_2. The Permittee shall limit the stationary source's SO_2 emissions to less than 250 tons in any 12 consecutive months. Monitor, record, and report as follows.

19.1 By the 15th of each month, calculate the previous month's total SO_2 emissions for each unit as follows.

a. Except as indicated in condition 19.1b, calculate and record the monthly SO_2 emissions using Equation 10.

Equation 10 $$SO_2 = TC \times EF \times \frac{1\,ton}{2000\,lb}$$

Where: SO_2 = SO_2 emissions (tons per month);

TC = Fuel consumption (gallons per month) for each unit measured or calculated in accordance with condition 16.1b; and

EF = SO_2 emission factor (lb per gallon) using an appropriate emission factor based on fuel sulfur content, as required under condition 23.

b. Except as indicated in condition 19.1c, for any specific unit, the Permittee may use the PTE for the unit as listed in Section 14 as the monthly SO_2 emissions.

c. The Permittee may recalculate the PTE for each unit listed in Section 14 using the actual fuel sulfur content allowed under condition 23, and use the recalculated PTE as monthly SO_2 emissions for a given unit.

19.2 Add the monthly SO_2 emission for all units calculated under condition 19.1 to obtain the stationary source monthly total. Add the monthly stationary source total to the stationary source total for the previous 11 months to determine the 12 consecutive month total for the stationary source.

19.3 Report as set out by condition 52, if the SO_2 emissions calculated under condition 19.2 exceed 250 tons per 12 consecutive months or any time the monitoring, recording, or reporting deviates from condition 19.

19.4 Include in the Operating Report required by condition 53, the monthly and 12-consecutive month total SO_2 emissions for the stationary source as calculated under condition 19.2.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, Revision 2, condition 11, 12/5/05]

Ambient Air Quality Requirements

20. General Ambient Air Quality Provisions. Build and maintain the stationary source as proposed in the March 2004 construction permit application. If the application is inconsistent with terms of this permit, then comply with the operating permit requirements.

20.1 Public Access Control Plan. The Permittee shall comply with the provisions of the Public Access Control Plan contained in the construction permit application dated March 2004, with the ambient air quality boundary as revised in construction permit application supplements submitted to the Department on June 9, 2004, June 14, 2004, and December 22, 2004.

a. The ambient air boundary shall be completely within the Lease Boundary established with each surface owner of lands and waters within the revised ambient air boundary.

b. Do not change the boundary of the controlled area without Department approval. For Department approval, submit proposed changes to the ambient air boundary, along with a revised ambient air impact analysis for those areas that will become ambient air. If the holder of the road easement across the

lease area demands or exercises access to that easement, the Permittee will no longer be in compliance with this condition and must immediately cease operating in violation of ambient air quality standards and obtain a permit that will demonstrate compliance with air quality standards and increments.

c. Do not revise the Public Access Control Plan without Department approval. Submit revisions to the Public Access Control Plan to the Department for written approval prior to implementing changes to the plan.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, Revision 2, condition 12, 12/5/05]

21. Posting of Warning Signs. The Permittee shall post signs at two locations at the stationary source docks, and additional signs at any actual or potential land access point that may be requested in the future by the Department.

21.1 The signs must be free of visible obstructions, with at least one sign at each location located within 15 yards of the most likely to be utilized access point on the dock or on land.

21.2 The signs must be mounted on posts or on the side of a building adjacent to the dock and include easily discernable lettering of at least 1" tall, except for the word "WARNING", which shall be at least 2" high and phrased as follows: "WARNING, air quality modeling has predicted that there may be occasional exceedances of air quality standards in this area. Additional information is available at the office."

21.3 The signs must be inspected at least semiannually, repaired or replaced such that no location remains un-posted.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Permit to Operate No. 9325-AA001, 6/26/95]

22. NO_2 Ambient Air Quality Protection. The Permittee shall protect the NO_2 ambient air quality standard and increment as follows:

22.1 Comply with the NOx limit in condition 16.

22.2 Comply with the general provisions in condition 20.

22.3 Comply with the exhaust stack provisions in conditions 23.4 and 23.5.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, Revision 2, condition 13, 9/6/05]

23. SO_2 Ambient Air Quality Protection. The Permittee shall protect the SO_2 standard and increment as follows:

23.1 Comply with the general provisions in condition 20.

23.2 Limit fuel sulfur content to 0.35 percent by weight for all emission units except Unit ID 30. Further restrictions may apply as set out by condition 23.5. Monitor, record, and report as set out by conditions 12 and 23.7.

23.3 For Unit ID 30, limit fuel sulfur content to 0.50 percent by weight and limit fuel consumption to 19.0 gallons per hour averaged over each calendar day. Monitor, record, and report as set out by condition 23.7 and 23.8.

23.4 Exhaust Stack Provisions.

a. Within 30 days of construction permit issuance or upon emission unit startup, whichever is later, extend and maintain the stack heights as listed in Table 5. Comply with these stack heights unless required to extend the stack height as set out by condition 23.5.

b. Each unit capable of operating with SCR shall have emission sampling ports and safe emission test sampling platforms consistent with 40 C.F.R. 60.8(e) and Appendix A Method 1 or 1A, and consistent with condition 18.

c. Monitor, record, and report as set out by condition 23.9.

Table 5 – Minimum Required Stack Heights (meters above grade)

Unit ID	Stack Height
1	20.6
2, 2a	21.5
3, 3a	21.5
4, 4a, 4b	20.6
5, 5a	20.6
6, 6a	20.6
7, 7a, 7b	21.5
8	27.5
9	27.5
10	21.5
11	21.5
12	27.5
23	19.0

Unit ID	Stack Height
24	11.2
25, 25a	7.6
26	20.6
27	6.00
28	7.02
28a	21.6
29	7.02
29a	21.6
30	8.31
31	7.6
32	7.6
33	21.6
34	21.6

23.5 If the Permittee installs additional engines, Unit IDs 28a, 29a, 33, and 34, the Permittee shall install them consecutively in the order 28a, 29a, 33, then 34, and as described in 23.5a, 23.5b, 23.5c, and 23.5d, respectively. In addition to the notifications required under conditions 3 and 0, notify the Department's Fairbanks Office in writing within 15 days after installation of each of Unit IDs 28a, 29a, 33, and 34. In the notification, for conditions 23.5b, 23.5c, and 23.5d, indicate which sub-condition will be used to comply with ambient air quality standards listed under the condition.

a. Upon installation of Unit ID 28a:

(i) remove Unit ID 28;

(ii) limit fuel sulfur of condition 23.2 to 0.32 percent by weight for all units except the Unit ID 30; and

(iii) extend and maintain the stack heights to the heights listed in Table 5.

b. Upon installation of Unit ID 29a, remove Unit ID 29, and comply with either condition 23.5b(i) or 23.5b(ii).

(i) Limit fuel sulfur of condition 23.2 to 0.29 percent by weight for all units except Unit ID 30, and extend and maintain stack heights to the heights listed in Table 5; or

(ii) Limit fuel sulfur of condition 23.2 to 0.30 percent by weight for all units except Unit ID 30; and extend and maintain the extended stack heights to the heights listed in Table 5, except extend and maintain the stack of:

(A) Unit IDs 28a and 29a to 27.6 meters above grade; and

(B) Unit ID 23 to 25.1 meters above grade.

c. Upon installation of Unit ID 33, comply with either condition 23.5c(i) or 23.5c(ii).

(i) Limit fuel sulfur of condition 23.2 to 0.27 percent by weight for all units except Unit ID 30, and extend and maintain stack heights to the heights listed in Table 5; or

(ii) Limit fuel sulfur of condition 23.2 to 0.28 percent by weight for all units except Unit ID 30, and extend and maintain the extended stack heights to the heights listed in Table 5, except extend and maintain the stack of:

(A) Unit IDs 28a, 29a, and 33 to 27.6 meters above grade; and

(B) Unit ID 23 to 25.1 meters above grade.

d. Upon installation of Unit ID 34, comply with either condition 23.5d(i) or 23.5d(ii).

(i) Limit fuel sulfur of condition 23.2 to 0.24 percent by weight for all units except Unit ID 30, and extend and maintain stack heights to the heights listed in Table 5; or

(ii) Limit fuel sulfur of condition 23.2 to 0.26 percent by weight for all units except Unit ID 30, and extend and maintain the extended stack heights to the heights listed in Table 5, except extend and maintain the stack of

(A) Unit IDs 28a, 29a, 33, and 34 to 27.6 meters above grade; and

(B) Unit ID 23 to 25.1 meters above grade.

23.6 Do not operate any secondary unit (Unit IDs 11, 24, 27 through 29) unless a comparable (like or larger sized) primary unit as listed in Table 6 is not operating for each operating secondary unit. When each secondary unit listed in Table 6 is started up:

a. record the unit ID, date, and time of startup and shutdown;

b. record the unit ID of the equivalent or larger sized replaced primary unit removed from operation prior to the secondary unit startup time; and

c. tag that primary unit as out of service until the date and time the secondary unit has shut down.

Table 6– Comparable Primary Emission Units

Secondary Unit	Comparable Primary Units
11	10
24	8, 9 or 23
27, 28, 29	1, 2, 2a, 3, 3a, 4b, 5, 5a, 6, 6a, 7a, 7b, 26, 28a, 29a, 33 and 34

23.7 Monitor fuel sulfur as follows:

a. Obtain a statement or receipt from the fuel supplier certifying the maximum sulfur content of the fuel for each shipment received. If a certified statement or receipt is not available from the supplier, analyze a representative sample of the fuel using an approved ASTM method, such as ASTM D 129, 1266, 1552, 2622, 3120, 4045, and 4294.

b. Except as indicated in condition 23.7c, calculate and record the sulfur content by weight of the fuel in each tank after each time the delivered fuel in condition 23.7a is added using Equation 11.

Equation 11 $$S_T = \frac{(Q_{F1} \times S_{F1}) + (Q_{F2} \times S_{F2}) + (Q_{F3} \times S_{F3})}{100}$$

Where: Q_{F1} = Quantity of Fuel 1, delivered fuel (percent of total fuel, by weight);

S_{F1} = Sulfur content of Fuel 1 (percent sulfur by weight);

Q_{F2} = Quantity of Fuel 2, fuel in tank before delivery (percent of total fuel, by weight);

S_{F2} = Sulfur content of Fuel 2 (percent sulfur by weight);

Q_{F3} = Quantity of Fuel 3, lower sulfur fuel as needed to meet applicable sulfur limit (percent of total fuel by weight);

S_{F3} = Sulfur content of Fuel 3 (percent sulfur by weight); and

S_T = Sulfur content of blended fuel in the tank (percent sulfur by weight).

c. If the sulfur content of any fuel delivery is less than the applicable limit specified in condition 23 (based on selected operating scenario), then the Permittee may elect to assume the sulfur content of the fuel in the tanks is the same as the maximum of any fuel added to that tank in the previous 12 months, and may forego fuel sulfur calculations in condition 23.7b.

d. Keep records of statements or receipts from the fuel supplier showing sulfur content and quantity of each shipment of fuel under condition 23.7a, results of each sulfur measurement required under condition 23.7a, and each fuel sulfur calculation for each tank conducted under condition 23.7b.

23.8 Monitor the fuel consumption rate for Unit ID 30 as follows:

a. Record the daily fuel consumption measured in conditions 16.1a and 16.1b, and the daily hours of operation measured in condition 16.1c.

b. Calculate and record the daily average fuel consumption rate in gallons per hour.

23.9 Provide as-built drawings and photographs of the modified/installed stacks and their emission sampling port locations:

a. for Unit ID 11, within 60 days of construction permit issuance or unit startup after construction permit issuance, whichever is later;

b. for Unit ID 23a, within 60 days of increasing height, if required; and

c. for Unit IDs 25a, 28a, 29a, 31, 32, 33 and 34, within 60 days of installation of the given new or replacement unit.

23.10 Report as set out by condition 52,

a. any time a secondary unit is operated without an equivalent or larger sized primary unit out-of-service, as indicated in condition 23.6;

b. any time the fuel sulfur content calculated under condition 23.7 of any fuel consumed exceeds an applicable limit listed in conditions 23.2 or 23.5;

c. any time the daily average fuel consumption rate for Unit ID 30 calculated under condition 23.8b exceeds 19.0 gallons per hour; and

d. any time the monitoring, recording, or reporting deviates from this condition 23.

23.11 Include in the Operating Report required by condition 53:

a. the operating records when any secondary unit (Unit IDs 11, 24, and 27 through 29) is operated as set out by condition 23.6.

b. the fuel sulfur content records as set out under condition 23.7. If Unit ID 30 receives fuel with a different fuel sulfur content from the other units, indicate the fuel sulfur content records applicable to this unit;

c. the fuel consumption records for Unit ID 30 as set out under condition 23.8b; and

d. a summary of the notifications provided in conditions 3, 4, and 23.9.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, Revision 2, condition 14, 12/5/05]

24. PM-10 Ambient Air Quality Protection. The Permittee shall protect the PM-10 ambient air quality standards and increments as follows:

24.1 Comply with the general provisions in conditions 20 and 12.2b.

24.2 Comply with the exhaust stack provisions in conditions 23.3 and 23.5.

24.3 Comply with the concurrent operation provisions in condition 23.6.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]
[Construction Permit No. 231CP03, Revision 2, condition 15, 12/5/05]

Section 6. Insignificant Emission Units

This section contains the requirements that the Permittee identified under 18 AAC 50.326(d)(2) as applicable to insignificant emission units at the stationary source. This section also specifies the testing, monitoring, recordkeeping, and reporting for insignificant emission units that the Department finds necessary to ensure compliance with the applicable requirements. Insignificant emission units are not exempted from any air quality control requirement or federally enforceable requirement.

25. For emission units at the stationary source that are insignificant as defined in 18 AAC 50.326(d)-(i) that are not listed in this permit, the following apply:

25.1 The Permittee shall submit the compliance certifications of condition 54 based on reasonable inquiry;

25.2 The Permittee shall comply with the requirements of conditions 6.2, 7.2, 26, 27 and 28;

25.3 The Permittee shall report in the Operating Report required by condition 53 if an emission unit is insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and actual emissions become greater than any of those thresholds;

25.4 No other monitoring, recordkeeping or reporting is required.

[18 AAC 50.346(b)(4), 10/1/04]

26. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by any of the following:

26.1 more than 20 percent for a total of more than three minutes in any one hour[8];

[18 AAC 50.050(a)(2) & 50.055(a)(1), 1/18/97]
[40 C.F.R. 52.70, 7/01/03]

26.2 more than 20 percent averaged over any six consecutive minutes[9].

[18 AAC 50.055(a)(1), 5/03/02]

27. The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1), 1/18/97]

28. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from an industrial process or fuel-burning equipment, to exceed 500 PPM averaged over three hours.

[18 AAC 50.055(c), 1/18/97]

[8] See Footnote 2.
[9] See Footnote 3.

Section 7. Generally Applicable Requirements

29. Asbestos NESHAP. The Permittee shall comply with the requirements set forth in 40 C.F.R. §61.145, §61.150, and §61.152, and the applicable sections set forth in 40 C.F.R. §61, Subpart A and Appendix A.

[18 AAC 50.040(b)(2)(F), 10/1/04]
[40 C.F.R. 61, Subparts A & M, and Appendix A, 7/1/03]

30. Refrigerant Recycling and Disposal. The Permittee shall comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. §82, Subpart F.

[18 AAC 50.040(d), 10/1/04]
[40 C.F.R. 82, Subpart F, 7/1/03]

31. Good Air Pollution Control Practice. The Permittee shall do the following for all emission units:

31.1 perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

31.2 keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and

31.3 keep a copy of either the manufacturer's or the operator's maintenance procedures.

[18 AAC 50.030, 50.346(b)(5), & 50.326(j)(5), 10/1/04]

32. Dilution. The Permittee shall not dilute emissions with air to comply with this permit.

[18 AAC 50.045(a) 1/18/97]

32.1 Check all ductwork and exhaust systems for leaks, and repair any leaks found, no sooner than 30 days prior to conducting a source test to demonstrate compliance with this permit.

32.2 Keep records of all inspections and repairs performed under this condition.

32.3 Upon request of the Department, submit copies of the records.

[18 AAC 50.326(a), 10/1/04]

33. Reasonable Precautions to Prevent Fugitive Dust. A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air.

33.1 The Permittee shall keep records of:

a. complaints received by the Permittee and complaints received by the Department and conveyed to the Permittee; and

b. any additional precautions that are taken:

(i) to address complaints described in condition 33.1a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

33.2 The Permittee shall report according to condition 36.

[18 AAC 50.346(c), 50.045(d), & 50.040(e), 10/1/04]

34. Stack Injection. The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a stationary source constructed or modified after November 1, 1982, except as authorized by a construction permit, Title V permit, or air quality control permit issued before October 1, 2004.

[18 AAC 50.055(g), 10/1/04]

35. Open Burning. The Permittee shall comply with the following requirements when conducting open burning at the stationary source.

35.1 General Requirements. A person conducting open burning shall comply with the limitations of conditions 35.2 through 35.6 and shall ensure that:

a. the material is kept as dry as possible through the use of a cover or dry storage;

b. before igniting the burn, non-combustibles are separated to the greatest extent practicable;

c. natural or artificially induced draft is present;

d. to the greatest extent practicable, combustibles are separated from grass or peat layer;

e. combustibles are not allowed to smolder; and

f. sufficient written records are kept to demonstrate that the Permittee complies with the limitations in this condition. Upon request of the Department, submit copies of the records.

35.2 Black Smoke Prohibited. Open burning of asphalts, rubber products, plastics, tars, oils, oily wastes, contaminated oil cleanup materials, or other materials in a way that gives off black smoke is prohibited without written Department approval. Department approval of open burning as an oil spill response countermeasure is subject to the Department's In Situ Burning Guidelines for Alaska, adopted by reference in 18 AAC 50.035. Open burning approved under this subsection is subject to the following limitations:

a. Open burning of liquid hydrocarbons produced during oil or gas well flow tests may occur only when there are no practical means available to recycle, reuse, or dispose of the fluids in a more environmentally acceptable manner;

b. The person who conducts open burning shall establish reasonable procedures to minimize adverse environmental effects and limit the amount of smoke generated; and

c. The Department will, in its discretion, as a condition of approval issued under this subsection, require public notice as described in condition 35.7.

35.3 Toxic and Acid Gases and Particulate Matter Prohibited. Open burning or incineration of pesticides, halogenated organic compounds, cyanic compounds, or polyurethane products in a way that gives off toxic or acidic gases or particulate matter is prohibited.

35.4 Adverse Effects Prohibited. Open burning of putrescible garbage, animal carcasses, or petroleum-based materials, including materials contaminated with petroleum or petroleum derivatives, is prohibited if it causes odor or black smoke that has an adverse effect on nearby persons or property.

35.5 Air Quality Advisory. Open burning is prohibited in an area if the Department declares an air quality advisory under 18 AAC 50.245, stating that burning is not permitted in that area for that day.

35.6 Wood Smoke Control Areas. Open burning is prohibited between November 1 and March 31 in a wood smoke control area identified in 18 AAC 50.025(b).

35.7 Public Notice. A person required to provide public notice of open burning shall issue the notice through local news media or by other appropriate means if the area of the open burning does not have local news media. The public notice must be issued as directed by the Department and must :

a. state the name of the person conducting the burn;

b. provide a list of material to be burned;

c. provide a telephone number to contact the person conducting the burn before and during the burn; and

d. state the expected time, date, and location of the open burning.

35.8 Complaints. A person required to provide public notice of open burning shall:

a. make a reasonable effort to respond to complaints received about the burn;

b. keep, for at least 30 days, a record of all complaints received about the burn, including to the extent feasible;

(i) telephone number of each person who complained;

(ii) a short summary of each complaint; and

(iii) any action the person conducting the open burning took to respond to each complaint; and

c. upon request, provide the Department with a copy of the records kept under condition 35.8b.

[18 AAC 50.065, 1/18/97; and 18 AAC 50.040(j) & 50.326(j), 10/1/04]
[40 C.F.R. 71.6(a)(3), 7/1/03]

36. Air Pollution Prohibited. No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.110, 5/26/72; 18 AAC 50.040(e) & 50.346(a), 10/1/04]

36.1 If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to condition 52.

36.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of condition 36.

36.3 The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if

a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of condition 36; or

b. the Department notifies the Permittee that it has found a violation of condition 36.

36.4 The Permittee shall keep records of:

a. the date, time, and nature of all emissions complaints received;

b. the name of the person or persons that complained, if known;

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of condition 36; and

d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.

36.5 With each stationary source Operating Report under condition 53, the Permittee shall include a brief summary report which must include:

a. the number of complaints received;

b. the number of times the Permittee or the Department found corrective action necessary;

c. the number of times action was taken on a complaint within 24 hours; and

d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.

36.6 The Permittee shall notify the Department of a complaint that is attributable to emissions from the stationary source within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.

[18 AAC 50.346(a) & 50.326(a), 10/1/04]
[40 C.F.R. 71.6(a)(3), 7/1/03]

37. **Technology-Based Emission Standard.** If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235, causes emissions in excess of a technology-based emission standard[10], the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under condition 52 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under condition 52.

[18 AAC 50.235(a) & 50.326(j)(5), 10/1/04]

38. **Permit Renewal.** To renew this permit, the Permittee shall submit a complete application under 18 AAC 50.326(a) no sooner than January 9, 2010 and no later than January 9, 2011. If a timely and complete application for renewal of an operating permit is submitted to the Department, the existing permit does not expire until the renewal permit has been issued or denied.

[18 AAC 50.040(j)(3) and 50.326(c)(2) & (j)(2), 10/1/04]
[40 C.F.R. 71.5(a)(iii) and 71.7(c)(1), 7/1/03]

[10] *Technology-based emission standard* means a best available control technology standard (BACT); a lowest achievable emission rate standard (LAER); a maximum achievable control technology standard established under 40 C.F.R. 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Section 8. General Source Testing and Monitoring Requirements

39. Requested Source Tests. In addition to any source testing explicitly required by this permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a), 1/18/97 & 18 AAC 50.345(a) & (k), 5/03/02]

40. Operating Conditions. Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing:

40.1 At a point or points that characterize the actual discharge to into the ambient air; and

40.2 At the maximum rated burning or operating capacity of the unit or another rate determined by the Department to characterize the actual discharge into the ambient air.

[18 AAC 50.220(b), 1/18/97]

41. Reference Test Methods. The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:

41.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. §60.

[18 AAC 50.220(c)(1)(A), 1/18/97 & 18 AAC 50.040(a), 10/1/04]
[40 C.F.R. 60, 7/1/03]

41.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. §61.

[18 AAC 50.040(b), 10/1/04 & 18 AAC 50.220(c)(1)(B), 1/18/97]
[40 C.F.R. 61, 7/1/03]

41.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. §63.

[18 AAC 50.040(c), 10/1/04 & 18 AAC 50.220(c)(1)(C), 1/18/97]
[40 C.F.R. 63, 7/1/03]

41.4 Source testing for the reduction in visibility through the exhaust effluent must be conducted as set out in Reference Method 9 and may use the forms in Section 13 to record data.

[18 AAC 50.030, 5/03/02, 18 AAC 50.220(c)(1)(D), 1/18/97]

41.5 Source testing for emissions of particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified 40 C.F.R. §60, Appendix A.

[18 AAC 50.040(a)(4), 10/1/04; & 18 AAC 50.220(c)(1)(E), 1/18/97]
[40 C.F.R. 60, Appendix A, 7/1/03]

41.6 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. §51, Appendix M.

[18 AAC 50.035(b)(2), 10/1/04; & 18 AAC 50.220(c)(1)(F), 1/18/97]
[40 C.F.R. 51, Appendix M, 7/1/03]

41.7 Source testing for emissions of any pollutant may be determined using an alternative method approved by the Department in accordance with Method 301 in Appendix A to 40 C.F.R. §63.

[18 AAC 50.040(c)(19), 10/1/04 & 18 AAC 50.220(c)(2), 1/18/97]
[40 C.F.R. 63, Appendix A, Method 301, 7/1/03]

42. **Excess Air Requirements.** To determine compliance with this permit, standard exhaust gas volumes must only include the volume of gases formed from the theoretical combustion of fuel, plus the excess air volume normal for the specific emission unit type, corrected to standard conditions (dry gas at 68°F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(c)(3), 1/18/97; & 18 AAC 50.990(102), 10/1/04]

43. **Test Exemption.** The Permittee is not required to comply with conditions 45, 46, or 47 when the exhaust is observed for visible emissions by Method 9 Plan or Smoke/No Smoke Plan.

[18 AAC 50.345(a), 5/03/02]

44. **Test Deadline Extension.** The Permittee may request an extension to a source test deadline established by the Department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee.

[18 AAC 50.345(a) & (l), 5/03/02]

45. **Test Plans.** Before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance, and must specify how the emission unit will operate during the test and how the Permittee will document this operation. A complete plan must be submitted within 60 days of receiving a request and at least 30 days before the scheduled date of any tests.

[18 AAC 50.345(a) & (m), 5/03/02]

46. **Test Notification.** At least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and time the source test will begin.

[18 AAC 50.345(a) & (n), 5/03/02]

47. **Test Reports.** Within 45 days after completing a source test, the Permittee shall submit two copies of the results, to the extent practical, in the format set out in the *Source Test Report Outline* of Volume III, Section IV.3 of the State Air Quality Control Plan, adopted by reference in 18 AAC 50.030(8). The Permittee shall certify the results as set out in condition 48 of this permit.

[18 AAC 50.345(a) & (o), 5/03/02]

Section 9. General Recordkeeping, Reporting, and Compliance Certification Requirements

48. Certification. The Permittee shall certify all reports, compliance certifications, or other documents submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete." Excess emission reports must be certified either upon submittal or within an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.

48.1 The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if:

a. a certifying authority registered under AS 09.25.510 verifies that the electronic signature is authentic; and

b. the person providing the electronic signature has made an agreement, with the certifying authority described in condition 48.1, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature.

[18 AAC 50.345(a) & (j), 5/3/02; 18 AAC 50.205 & 50.326(j), 10/1/04]
[40 C.F.R. 71.6(a)(3)(iii)(A), 7/1/03]

49. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall send two copies of reports, compliance certifications, and other submittals required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with condition 48.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.6(a)(3)(iii)(A), 7/1/03]

50. Information Requests. The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by this permit. The Department, in its discretion, will require the Permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.345(a) & (i), 5/3/02; 18 AAC 50.200 & 50.326(a), 10/1/04]
[40 C.F.R. 71.5(a)(2) & 71.6(a)(3), 7/1/03]

51. Recordkeeping Requirements. The Permittee shall keep all records required by this permit for at least five years after the date of collection, including

51.1 Copies of all reports and certifications submitted pursuant to this section of this permit.

51.2 Records of all monitoring required by this permit, and information about the monitoring including:

a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;

b. sampling dates and times of sampling and measurements;

c. the operating conditions that existed at the time of sampling or measurement;

d. the date analyses were performed;

e. the location where samples were taken;

f. the company or entity that performed the sampling and analyses;

g. the analytical techniques or methods used in the analyses; and

h. the results of the analyses.

[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 60.7(f), Subpart A and §71.6(a)(3)(ii)(B), 7/1/03]

52. Excess Emission and Permit Deviation Reports.

52.1 Except as provided in condition 36, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report

(i) emissions that present a potential threat to human health or safety; and

(ii) excess emissions that the Permittee believes to be unavoidable;

b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or non-routine repair that causes emissions in excess of a technology based emission standard;

c. report all other excess emissions and permit deviations

(i) within 30 days of the end of the month in which the emissions or deviation occurs or is discovered, except as provided in condition 52.1c(ii) or 52.1c(iii);

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under condition 52.1c(i); and

(iii) for failure to monitor, as required by other applicable conditions in this permit.

52.2 The Permittee must report using either the Department's on-line form, or if the Permittee prefers, the form contained in Section 14 of this permit. The Permittee must provide all information called for by the form that is used.

52.3 If requested by the Department, the Permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

[18 AAC 50.235(a)(2), 50.240(c), & 50.326(j)(3), & 50.346(b)(2), 10/1/04]

53. Operating Reports. During the life of this permit, the Permittee shall submit an original and two copies of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

53.1 The operating report must include all information required to be in operating reports by other conditions of this permit.

53.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under condition 53.1, either

a. the Permittee shall identify

(i) the date of the deviation;

(ii) the equipment involved;

(iii) the permit condition affected;

(iv) a description of the excess emissions or permit deviation; and

(v) any corrective action or preventive measures taken and the date or dates of such actions; or

b. when excess emissions or permit deviations have already been reported under condition 52, the Permittee may cite the date or dates of those reports.

53.3 The operating report must include a listing of emissions monitored under condition(s) 68.1e and 68.2c which trigger additional testing or monitoring, and whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report:

a. the date of the emissions;

b. the equipment involved;

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

[18 AAC 50.346(b)(6) & 50.326(a), 10/1/04]
[40 C.F.R. 71.6(a)(3)(iii)(A), 7/1/03]

54. Annual Compliance Certification. Each year by March 31, the Permittee shall compile and submit to the Department one original and one copy of an annual compliance certification report as follows:

[18 AAC 50.205 & 50.326(j), 10/1/04 & 50.345(a) & (j), 5/03/02]
[40 C.F.R. 71.6(c)(5), 7/1/03]

54.1 Certify the compliance status of the stationary source over the preceding calendar year consistent with the monitoring required by this permit, as follows:

a. identify each term or condition set forth in Section 2 through Section 9, that is the basis of the certification;

b. briefly describe each method used to determine the compliance status;

c. state whether compliance is intermittent or continuous; and

d. identify each deviation and take it into account in the compliance certification.

54.2 In addition, submit a copy of the report directly to the EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

Section 10. Standard Conditions Not Otherwise Included in the Permit

55. Compliance with permit terms and conditions is considered to be compliance with those requirements that are:

55.1 included and specifically identified in the permit; or

55.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.326(j)(3), 10/1/04 & 50.345(a) & (b), 5/03/02]

56. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for:

56.1 an enforcement action;

56.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or

56.3 denial of an operating-permit renewal application.

[18 AAC 50.326(j)(3), 10/1/04 & 50.345(a) & (c), 5/03/02]

57. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.326(j)(3), 10/1/04 & 50.345(a) & (d), 5/03/02]

58. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.326(j)(3), 10/1/04 & 50.345(a) & (e), 5/03/02]

59. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[18 AAC 50.326(j)(3), 10/1/04 & 50.345(a) & (f), 5/03/02]

60. The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.326(j)(3), 10/1/04 & 50.345(a) & (g), 5/03/02]

61. The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to:

61.1 enter upon the premises where a emission unit subject to the permit is located or where records required by the permit are kept;

61.2 have access to and copy any records required by the permit;

61.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and

61.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.326(j)(3), 10/1/04 & 50.345(a) & (h), 5/03/02]

62. Emissions Trading: No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit.

[18 AAC 50.040(j)(4) and 50.326(j), 10/1/04]
[40 C.F.R. 71.6(a)(8), 7/1/03]

63. Off Permit Changes. The Permittee may make changes that are not addressed or prohibited by this permit, other than those subject to the requirements of 40 C.F.R. 72 through 78 or those that are modifications under any provision of Title I of the Act to be made without a permit revision, provided that the following requirements are met:

63.1 Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;

63.2 Provide contemporaneous written notice to the Department (and EPA, in the case of a program delegated pursuant to 40 C.F.R. 71.10) of each such change, except for changes that qualify as insignificant under 18 AAC 50.326(d) – (i). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change;

63.3 The change shall not qualify for the shield under 40 C.F.R. 71.6(f); and

63.4 The Permittee shall keep a record describing changes made at the stationary source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

[18 AAC 50.040(j)(4) and 50.326(j), 10/1/04]
[40 C.F.R. 71.6(a)(12), 7/1/03]

64. Operational Flexibility. The Permittee may make changes within the stationary source without requesting for a permit revision if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions):

64.1 Provided that the Permittee provides the Department (and EPA, in the case of a program delegated pursuant to 40 C.F.R. 71.10) with written notification at least seven days in advance of the proposed change.

64.2 The Permittee shall follow the applicable notification requirements provided in 40 C.F.R. 71.6(a)(13)(i) and (iii).

64.3 The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made under 40 C.F.R. 71.6(a)(13)(i).

[18 AAC 50.040(j)(4) and 50.326(j), 10/1/04]
[40 C.F.R. 71.6(a)(13), 7/1/03]

65. Transfer of Ownership. The Permittee shall apply for an administrative permit amendment to allow for a change in ownership or operational control of a stationary source where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the Department.

[18 AAC 50.040(j)(5) and 50.326(j), 10/1/04]
[40 C.F.R. 71.7(d)(iv), 7/1/03]

Section 11. Permit As Shield from Inapplicable Requirements

In accordance with AS 46.14.290, and based on information supplied in the stationary source application, this section of the permit contains the requirements determined by the Department not to be applicable to the stationary source.

66. Nothing in this permit shall alter or affect the following:

66.1 The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section; or

66.2 The liability of an owner or operator of a stationary source for any violation of applicable requirements prior to or at the time of permit issuance.

67. Table 7 identifies the emission units that are not subject to the specified requirements at the time of permit issuance. If any of the requirements listed in Table 7 become applicable during the permit term, the Permittee shall comply with such requirements on a timely basis including, but not limited to, providing appropriate notification to EPA, obtaining a construction permit and/or an operating permit revision.

Table 7 - Permit Shields Granted

Unit ID	Non-Applicable Requirements	Reason for Non-Applicability
All	18 AAC 50.306 for PSD major stationary sources	Emissions of pollutants are less than the PSD applicability thresholds of 40 C.F.R. 52.21
All	18 AAC 50.316 for major sources of HAPs	HAP emissions are less than the major source thresholds (10/25 TPY)
30	40 C.F.R. 60, Subpart Cb - Emissions guidelines and compliance times for large municipal waste combustors that are constructed on or before September 20, 1994	The maximum charging rate for this incinerator is less than 250 tons per day, and the incinerator was constructed after September 20, 1994
30	40 C.F.R. 60, Subpart Ce - Emission guidelines and compliance times for hospital/medical/infectious waste incinerators	This incinerator does not burn hospital/medical/infectious wastes
8, 9, 12, and 23a	40 C.F.R. 60, Subpart Dc - Standards of performance for small industrial-commercial-institutional steam generating units	These emission units were constructed before the applicability date of June 9, 1989
10, 11, 24	40 C.F.R. 60, Subpart Dc - standards of performance for small industrial-commercial-institutional steam generating units	Each heat input rating is less than 10 MMBtu per hour
30	40 C.F.R. 60, Subpart E - Standards of Performance for Incinerators	The maximum charging rate for this incinerator is less than 50 tons per day

Unit ID	Non-Applicable Requirements	Reason for Non-Applicability
30	40 C.F.R. 60, Subpart Ea - Standards of performance for municipal waste combustors for which construction is commenced after December 20, 1989 and on or before September 20, 1994	The maximum charging rate for this incinerator is less than 250 tons per day, and construction commenced after September 20, 1994
30	40 C.F.R. 60, Subpart Eb - Standards of performance for large municipal waste combustors for which construction is commenced after September 20, 1994 or for which modification or reconstruction is commenced after June 19, 1996	The maximum charging rate for this incinerator is less than 250 tons per day
30	40 C.F.R. 60, Subpart Ec - Standards of performance for hospital/medical/infectious waste incinerators for which construction is commenced after June 20, 1996	This incinerator does not burn hospital/medical/infectious wastes
T1 Through T6	40 C.F.R. 60 Subpart K - Standards of performance for storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after June 11, 1973, and prior to May 19, 1978	All fuel storage tanks were constructed and installed after 1978
T1 through T6	40 C.F.R. 60 Subpart Ka - Standards of performance for storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after May 18, 1978, and prior to July 23, 1984	Tank T6 was installed in 1982, but it does not store a petroleum liquid as defined in 40 C.F.R. 60.111a(b). Tanks T1 through T5 were constructed and installed after 1984
T1 through T6	40 C.F.R. 60 Subpart Kb - Standards of performance for storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after July 23, 1984	The fuels stored in Tanks T1 through T5 have vapor pressures less than 3.5 kPa. Tank T6 was constructed and installed before 1984
30	40 C.F.R. 60, Subpart O - Standards of performance for sewage treatment plants	This incinerator combusts wastes containing less than 10 percent sewage sludge (dry basis) produced by municipal sewage treatment plants and charges less than 2205 lb per day municipal sewage sludge (dry basis)
30	40 C.F.R. 60, Subpart AAAA - Standards of performance for small municipal waste combustion units for which construction is commenced after August 30, 1999 or for which modification or reconstruction is commenced after June 6, 2001	The maximum charging rate for this incinerator is less than 35 tons per day

Unit ID	Non-Applicable Requirements	Reason for Non-Applicability
30	40 C.F.R. 60, Subpart BBBB - Emission guidelines and compliance times for small municipal waste combustion units constructed on or before August 30, 1999	This incinerator was constructed after August 30, 1999
30	40 C.F.R. 60, Subpart CCCC - Standards of performance for commercial and industrial solid waste incineration units for which construction is commenced after November 30, 1999, or for which modification or reconstruction is commenced on or after June 1, 2001	This incinerator burns more than 30 percent MSW and has the capacity to burn less than 35 tons per day MSW
30	40 C.F.R. 60, Subpart DDDD - Emissions guidelines and compliance times for commercial and industrial solid waste incineration units that commenced construction on or before November 30, 1999	This incinerator was constructed after November 30, 1999
30	40 C.F.R. 61, Subpart C - National emission standard for beryllium	This incinerator does not process beryllium-containing wastes
All	40 C.F.R. 61, Subpart V - NESHAP for equipment leaks (fugitive emission sources)	The stationary source does not operate volatile hazardous air pollutant service
30	40 C.F.R. 62, Subpart HHH - Federal plan requirements for hospital/medical/ infectious waste incinerators constructed on or before June 20, 1996	This incinerator was constructed after June 20, 1996
All	40 C.F.R. 63, Subpart Y - NESHAP for marine tank vessel loading operations	The stationary source does not load marine tank vessels
1 through 7b, 25/25a, 26 through 29a, 31 through 34	40 C.F.R. 63 ZZZZ for Reciprocating Internal Combustion Engines	The stationary source is not a major source of HAP emissions.
8-24	40 C.F.R. 63, Subpart DDDDD - NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters	The stationary source is not a major source of HAPs

[18 AAC 50.326(j), 10/1/04]
[40 C.F.R. 71.6(f)(1)(ii), 7/1/03]

Section 12. Visible Emissions and Particulate Matter Monitoring Plan

68. Visible Emissions Monitoring. The Permittee shall observe the exhaust of Unit IDs 1, 2a, 3a, 4b, 5a, 6a, 7b, 8, 9,12, 23a, 25a, 26, 28a, 29a, 30, and 31-34 (and Unit IDs 25, 27, 28, and 29 if they are no longer considered insignificant as set out by condition 6.2) for visible emissions using either the Method 9 Plan under condition 68.1 or the Smoke/No-Smoke Plan under condition 68.2. The Permittee may change visible-emissions plans for an emission unit at any time unless prohibited from doing so by condition 68.3.

68.1 **Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.

a. First Method 9 Observation[11]. Observe exhaust for 18 minutes within 90 days after initial start-up of each new or modified emission unit and 14 calendar days after changing from the Smoke/No-Smoke Plan of condition 68.2. In addition, conduct a one-time Method 9 observation for each emission unit burnings fuel blends (fish oil blend and used oil blend) as set out by conditions 12.5 and 13.3f.

b. Monthly Method 9 Observations[12]. After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that an emission unit operates.

c. Semiannual Method 9 Observations[13]. After observing emissions for three consecutive operating months under condition 68.1b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, observe emissions at least semiannually for 18 minutes.

semiannual observations must be taken between four and seven months after the previous set of observations.

d. Annual Method 9 Observations[14]. After at least two semiannual 18-minute observations, unless a six-minute average is greater than 15 percent and one or more individual observations are greater than 20 percent, observe emissions at least annually.

Annual observations must be taken between 10 and 13 months after the previous observations and must include at least three 6-minute sets of observations.

[11] According to the Department's on-file records, Unit IDs 6a, 7b, 25a, 28a, 29a, and 31-34 (and substitute units) are each under this scenario needing the first readings after initial start-up.
[12] According to the Department's on-file records, Unit IDs 11 and 23a qualify for the second monthly read, and Unit ID 2a qualifies for the third monthly read.
[13] According to the Department's on-file records, Unit IDs 3a and 5a qualify for the first semiannual read.
[14] According to the Department's on-file records, Unit IDs 1, 4b, 8, 9, 10, 12, 26, and 30 qualify for annual reads.

e. Increased Method 9 Frequency. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emission unit to at least monthly intervals, until the criteria in condition 68.1c for semiannual monitoring are met.

68.2 **Smoke/No Smoke Plan.** Observe the exhaust for the presence or absence of visible emissions, excluding condensed water vapor.

a. Initial Monitoring Frequency. Observe the exhaust during each calendar day that an emission unit operates.

b. Reduced Monitoring Frequency. After the emission unit has been observed on 30 consecutive operating days, if the emission unit operated without visible smoke in the exhaust for those 30 days, then observe emissions at least once in every calendar month that an emission unit operates.

c. Smoke Observed. If smoke is observed, either begin the Method 9 Plan of condition 68.1 or perform the corrective action required under condition 68.3.

68.3 **Corrective Actions Based on Smoke/No Smoke Observations**. If visible emissions are present in the exhaust during an observation performed under the Smoke/No Smoke Plan of condition 68.2, then the Permittee shall either follow the Method 9 plan of condition 68.1 or

a. initiate actions to eliminate smoke from the emission unit within 24 hours of the observation;

b. keep a written record of the starting date, the completion date, and a description of the actions taken to reduce smoke; and

c. after completing the actions required under condition 68.3a,

(i) take Smoke/No Smoke observations in accordance with condition 68.2

(A) at least once per day for the next seven operating days and until the initial 30 day observation period is completed; and

(B) continue as described in condition 68.2b; or

(ii) if the actions taken under condition 68.3a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of condition 68.3c(i), then observe the exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan; after observing smoke and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke Plan under condition 68.2a.

69. Visible Emissions Record Keeping. The Permittee shall keep records in accordance with this condition 69.

69.1 If using the Method 9 Plan of condition 68.1,

a. the observer shall record

(i) the name of the stationary source, emissions unit and location, stationary source type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet in Section 13;

(ii) the time, estimated distance to the emissions location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate) on the sheet at the time opacity observations are initiated and completed;

(iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;

(iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation Record in Section 13; and

(v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period;

b. to determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet;

c. calculate and record the highest 18-consecutive-minute average observed.

69.2 If using the Smoke/No Smoke Plan of condition 68.2, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:

a. the date and time of the observation;

b. from Table 1, the ID of the emission unit observed;

c. whether visible emissions are present or absent in the exhaust;

d. a description of the background to the exhaust during the observation;

e. if the emission unit starts operation on the day of the observation, the startup time of the emission unit;

f. name and title of the person making the observation; and

g. operating rate (load or fuel consumption rate).

70. Visible Emissions Reporting. The Permittee shall report visible emissions as follows:

70.1 include in each Operating Report under condition 53:

a. which visible-emissions plan of condition 68 was used for each emission unit; if more than one plan was used, give the time periods covered by each plan;

b. for each emission unit under the Method 9 Plan,

(i) copies of the observation results (i.e. opacity observations) for each emission unit that used the Method 9 Plan, except for the observations the Permittee has already supplied to the Department; and

(ii) a summary to include:

(A) number of days observations were made;

(B) highest six-minute average observed; and

(C) dates when one or more observed six-minute averages were greater than 20 percent;

c. for each emission unit under the Smoke/No Smoke Plan, the number of days that Smoke/No Smoke observations were made and which days, if any, that smoke was observed; and

d. a summary of any monitoring or record keeping required under conditions 68 and 69 that was not done;

70.2 report under condition 52:

a. the results of Method 9 observations that exceed an average 20 percent for any six-minute period; and

b. if any monitoring under condition 68 was not performed when required, report within three days of the date the monitoring was required.

71. Particulate Matter Monitoring for Diesel Engines. The Permittee shall conduct source tests on diesel engines listed in Table 1, Table 2, and Table 3, to determine the concentration of particulate matter (PM) in the exhaust of an emission unit in accordance with this condition 71.

71.1 Within six months of exceeding the criteria of condition 71.2a or 71.2b, either

a. conduct a PM source test according to Section 8; or

b. make repairs so that emissions no longer exceed the criteria of condition 71.2; to show that emissions are below those criteria, observe emissions as described in condition 68.1 under load conditions comparable to those when the criteria were exceeded.

71.2 Conduct the test according to condition 71.1 if:

a. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent; or

b. for an emission unit with an exhaust stack diameter that is less than 18 inches, 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity that is greater than 15 percent and not more than 20 percent, unless the Department has waived this requirement in writing.

71.3 During each one hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one hour test run. Submit a copy of these observations with the source test report.

71.4 The automatic PM source test requirement in condition 71.1 and 71.2 is waived for an emissions unit if a PM source test on that unit has shown compliance with the PM standard during this permit term.

72. Particulate Matter Record Keeping for Diesel Engines. The Permittee shall record the exhaust stack diameters of each diesel engine listed in Table 1, Table 2, and Table 3.

73. Particulate Matter Reporting for Diesel Engines. The Permittee shall report as follows:

73.1 report under condition 52:

a. the results of any PM source test that exceeds the PM emissions limit; or

b. if one of the criteria of condition 71.2 was exceeded and the Permittee did not comply with either condition 71.1a or 71.1b, this must be reported by the day following the day compliance with condition 71.1 was required;

73.2 report observations in excess of the threshold of condition 71.2b within 30 days of the end of the month in which the observations occur;

73.3 in each Operating Report under condition 53, include:

a. the dates, emission unit IDs, and results when an observed 18-minute average was greater than an applicable threshold in condition 71.2;

b. a summary of the results of any PM testing under condition 71; and

c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of condition 71.2, if they were not already submitted.

[18 AAC 50.346(c), 10/1/04]
[18 AAC 50.326(a), 10/1/04]
[40 C.F.R. 71.2 and 71.6(a)(3), 7/1/03]

Section 13. Visible Emissions Forms

Visible Emissions Field Data Sheet

Certified Observer: _____

Company & Stationary Source: _____

Location: _____

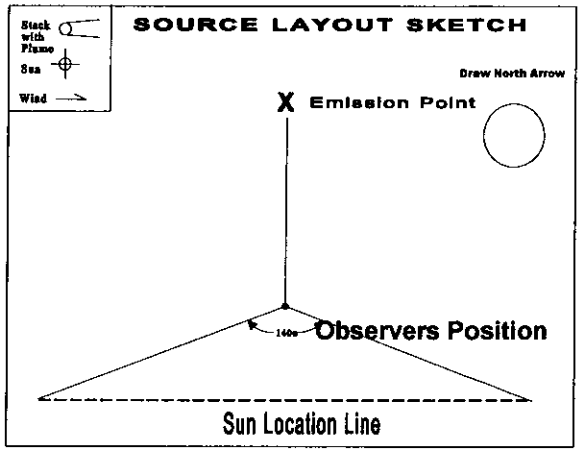
Test No.: _____ Date: _____

Emission Unit: _____

Production Rate/Operating Rate: _____

Unit Operating Hours: _____

Hrs. of observation: _____



Clock Time	Initial				Final
Observer location Distance to discharge					
Direction from discharge					
Height of observer point					
Background description					
Weather conditions Wind Direction					
Wind speed					
Ambient Temperature					
Relative humidity					
Sky conditions: (clear, overcast, % clouds, etc.)					
Plume description: Color					
Distance visible					
Water droplet plume? (Attached or detached?)					
Other information					

Visible Emissions Observation Record

Page _____ of _____

Company & Stationary Source _____ Certified Observer _____

Test Number Clock Time

Date:		Visibility reduction every 15 Seconds (Opacity)				Steam Plume (check if applicable)		Comments
Hr	Min	0	15	30	45	Attached	Detached	

Additional information:

_____ _____

Observer Signature and Date Certified By and Date

Data Reduction:

Duration of Observation Period (minutes): _____ Duration Required by Permit (minutes) _____

Number of Observations _____ Highest Six –Minute Average Opacity (%) _____

Number of Observations exceeding 20% _____

In compliance with three-minute aggregate opacity limit? (Yes or No) _____

In compliance with six-minute opacity limit? (Yes or No) _____

Average Opacity Summary

Set Number	Time Start—End	Opacity	
		Sum	Average

Section 14. Emissions Data

Table 8a -- Uncontrolled NOx Emission Factors and Monthly Potential to Emit (Low NOx Mod Setting)

Unit ID	Unit Description	Uncontrolled NOx EF based on % load (lb/gal)							Design Fuel Con. @ 100% load (gph)	NOx PTE (TPM)
		≤50	51 – 70	70	71 - 84	85	86 - 99	100		
1, 4b, 28a, 29a, 33, 34	Caterpillar Model D3516B Quad Turbo Low NOx Diesel Electric Generator (1,655 kW)	0.233	0.236	0.236	0.246	0.246	0.246	0.239	118.6	10.3
7a	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator (1,135 kW)	0.352	0.352	0.317	0.317	0.269	0.278	0.278	78.3	7.9
2a, 3a, 5a, 7b	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator (1,360 kW)	0.242	0.242	0.209	0.209	0.204	0.208	0.208	98.9	7.5
6	Caterpillar Model D3512B Twin Turbo Low NOx Diesel Electric Generator (1,240 kW)	0.155	0.176	0.176	0.200	0.200	0.219	0.219	85.8	6.9
6a	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator (1,240 kW)	0.252	0.252	0.217	0.217	0.205	0.205	0.203	88.4	6.5
8, 9	Cleaver Brooks Model 400 Steam Boiler	n/a	n/a	n/a	n/a	n/a	n/a	0.0200	122.2	0.9
10, 11	Johnston Steam Boiler	n/a	n/a	n/a	n/a	n/a	n/a	0.0200	37.3	0.3
12	Pedar Halvorsen Furnace	n/a	n/a	n/a	n/a	n/a	n/a	0.0200	252.6	1.8
23a	Cleaver Brooks Model 500 Steam Boiler	n/a	n/a	n/a	n/a	n/a	n/a	0.0200	153.3	1.1
24	Falcon Boiler	n/a	n/a	n/a	n/a	n/a	n/a	0.0200	7.4	0.1
25, 25a, 31, 32 (& replacements)	Portable Diesel Electric Generator	n/a	n/a	n/a	n/a	n/a	n/a	0.400	18.7	27
26	Caterpillar Model D3508B Twin Turbo Compressor Engine	0.203	0.203	0.203	0.203	n/a	n/a	n/a	62.6 (79% load)	4.6
27	Caterpillar D3512A	0.335	0.373	0.373	0.373	0.356	0.356	0.305	85.7	9.5
28, 29	Caterpillar D379	n/a	n/a	n/a	n/a	n/a	n/a	0.222	31.0	2.5

Table Note: NO_X Emission Factors and PTE will change upon Department approval of future source tests. Permittee may conduct new source tests at its discretion, according to a Department-approved test plan, for different engine configuration setting changes (e.g., low-NOx mode vs. fuel economy mode settings).

[Construction Permit No. 231CP03, Revision 2, Exhibit A, 12/5/05]

Table 8b – Alternative Uncontrolled NOx Emission Factors and Monthly Potential to Emit (Fuel Economy Mode Setting)

Unit ID	Unit Description	Uncontrolled NOx EF based on % load (lb/gal)										Design Fuel Con. @ 100% load (gph)	NOx PTE (TPM)
		≤50	51 – 69	70	71 - 74	75	76 - 79	80	81 - 89	90	91 - 99	100	
1, 4b, 28a, 29a, 33, 34	Caterpillar Model D3516B Quad Turbo Low NOx Diesel Electric Generator (1,655 kW)	0.516	0.516	0.513	0.517	0.517	0.540	0.540	0.540	0.525	0.525	0.474	109.0	18.9
2a, 3a, 5a, 7b	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator (1,360 kW)	0.516	0.518	0.518	0.519	0.519	0.519	0.490	0.490	0.476	0.476	0.422	91.5	14.1
6a	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator (1,240 kW)	0.550	0.550	0.544	0.544	0.525	0.525	0.518	0.518	0.479	0.479	0.386	90.1	12.7
26	Caterpillar Model D3508B Twin Turbo Compressor Engine	0.440	0.440	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	48.2 (67% load)	7.7

Table Note: NOx emission factors, fuel consumption, and PTE will change upon Department approval of future source tests. Permittee may conduct new source tests at its discretion, according to a Department-approved test plan. Permittee shall use the emission factors, fuel consumption, and PTE in Table 8a when operating in low NOx emission mode setting. The alternative emission factors, fuel consumption, and PTE in Table 8b above are used for engine/generators when operating in fuel economy mode setting.

Table 9a -- SO_2 Emission Factors and Monthly Potential to Emit (Low NOx Mode Setting)

Unit ID	Unit Description	Design Fuel Con. @ 100% load (gph)	SO_2 PTE w/ 0.35% fuel sulfur content (TPM)
1, 4b, 28a, 29a, 33, 34	Caterpillar Model D3516B Quad Turbo Low NOx Diesel Electric Generator (1,655 kW)	118.6	2.2
7a	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator (1,135 kW)	78.3	1.4
2a, 3a, 5a, 7b	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator (1,360 kW)	98.9	1.8
6	Caterpillar Model D3512B Twin Turbo Low NOx Diesel Electric Generator (1,240 kW)	85.8	1.6
6a	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator (1,240 kW)	88.4	1.6
8, 9	Cleaver Brooks Model 400 Steam Boiler	122.2	2.2
10, 11	Johnston Steam Boiler	37.3	0.7
12	Pedar Halvorsen Furnace	252.6	4.6
23a	Cleaver Brooks Model 500 Steam Boiler	153.3	2.8
24	Falcon Boiler	7.4	0.1
25, 25a, 31, 32 (& replacements)	Portable Diesel Electric Generator	18.7	0.3
26	Caterpillar Model D3508B Twin Turbo Compressor Engine	62.6 (79% load)	1.1
27	Caterpillar D3512A	85.7	1.6
28, 29	Caterpillar D379	31.0	0.6

Table Note: SO_2 PTE will change if fuel sulfur content is different than 0.35 wt% S and/or if design fuel consumption at 100% load changes due to engine configuration setting changes (e.g., low-NOx mode vs. fuel economy mode settings).

[Construction Permit No. 231CP03, Revision 2, Exhibit A, 12/5/05]

Table 9b - Alternative SO_2 Emission Factors and Monthly Potential to Emit (Fuel Economy Mode Setting)

Unit ID	Unit Description	Design Fuel Con. @ 100% load (gph)	SO_2 PTE w/ 0.35% fuel sulfur content (TPM)
1, 4b, 28a, 29a, 33, 34	Caterpillar Model D3516B Quad Turbo Low NOx Diesel Electric Generator (1,655 kW)	109.0	2.0
2a, 3a, 5a, 7b	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator (1,360 kW)	91.5	1.7
6a	Caterpillar Model D3512B Quad Turbo Low NOx Diesel Electric Generator (1,240 kW)	90.1	1.6
26	Caterpillar Model D3508B Twin Turbo Compressor Engine	48.2(67% load)	0.9

Table Note: SO_2 PTE will change if fuel sulfur content is different than 0.35 wt% S and/or if design fuel consumption at 100% load changes due to engine configuration setting changes (e.g., low-NOx mode vs. fuel economy mode settings).

Section 15. ADEC Notification Form ADEC Notification Form[15]

Stationary Source Name _____ Air Quality Permit Number _____

Company Name _____

When did you discover the Excess Emissions/Permit Deviation?

Date: _____ / _____ / _____ Time: _____ : _____

When did the event/deviation occur?

Begin Date: _____ / _____ / _____ Time: _____ : _____ (please use 24hr clock)
End Date: _____ / _____ / _____ Time: _____ : _____ (please use 24hr clock)

What was the duration of the event/deviation?: _____ : _____ (hrs:min) or _____ days
(total # of hrs, min, or days, if intermittent then include only the duration of the actual emissions/deviation)

Reason for Notification: (please check only 1 box and go to the corresponding section)

☐ Excess Emissions - Complete Section 1 and Certify.

☐ Deviation from Permit Condition - Complete Section 2 and Certify

☐ Deviations from COBC, CO, or Settlement Agreement - Complete Section 2 and Certify

Section 1. Excess Emissions

Was the exceedance: ☐ Intermittent ☐ Continuous

Cause of Event (Check one that applies):

☐ Start Up /Shut ☐ Natural Cause (weather/earthquake/flood)

☐ Control Equipment Failure ☐ Scheduled Maintenance/Equipment Adjustment

☐ Bad fuel/coal/gas ☐ Upset Condition ☐ Other _____

(a) Description

Describe briefly, what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance.

(b) Emissions Units Involved:

Identify the emission unit involved in the event, using the same identification number and name as in the permit. Identify each emission standard potentially exceeded during the event and the exceedance.

EU ID	Emission Unit Name	Permit Condition Exceeded/Limit/Potential Exceedance

[15] Revised as of December 6, 2004

(c) Type of Incident (Please Check only one).

☐ Opacity _____ % ☐ Venting _____ (gas/scf) ☐ Control Equipment Down

☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Record Keeping Failure

☐ Marine Vessel Opacity ☐ Failure to moitor/report ☐ Flaring

☐ Other: _____

(d) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable? ☐ Yes ☐ No

Do you intend to assert the affirmative defense of 18 AAC 50.235? ☐ Yes ☐ No

Certify Report (go to end of form)

Section 2 Permit Deviations

(a) Permit Deviation Type (check one only box, corresponding with the section in the permit).

☐ Emission Unit Specific

☐ General Source Test/Monitoring Requirements

☐ Recordingkeeping/Reporting/Compliance Certification

☐ Standard Conditions Not Included in Permit

☐ Generally Applicable Requirements

☐ Reporting/Monitoring for Diesel Engines

☐ Insignificant Emission Unit

☐ Stationary Source Wide

☐ Other Section _____ (title of section and section number of your permit).

(b) Emission Unit Involved.

Identify the emission unit involved in the event, using the same identification number and name as in the permit. List the corresponding permit conditions and the deviation.

EU ID	Emission Unit Name	Permit Condition / Potential Deviation

(c) Description of Potential Deviation:

Describe briefly what happened and the cause. Include the parameters/operating conditions and the potential deviation.

(d) Corrective Actions:
Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence.

Certifcation:

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

To Submit this Report:

Fax to: 907-451-2187;

Email to: airreports@dec.state.ak.us - *if emailed, the report must be certified within the Operating Report required for the same reporting period per condition 52;*

Mail to: ADEC, Air Permits Program, 610 University Avenue, Fairbanks, AK 99709-3643;

Phone Notification: 907-451-5173 - p*hone notifications require a written follow-up report within the deadline listed in condition 52; OR*

Online Submission: *(Website is not yet available) - if submitted online, the report must be certified within the Operating Report required for the same reporting period per condition 48.*

Alaska Department of Environmental Conservation

Air Permits Program

Final

STATEMENT OF BASIS

of the terms and conditions for

Permit No. AQ0231TVP02

Trident Seafoods Corporation

Akutan Seafood Processing Facility

Prepared by Jeanette Brena

July 10, 2006

Minor Revision

Prepared by Tim Knapp

January 31, 2007

INTRODUCTION

This document sets forth the legal and factual basis for the terms and conditions of renewal Operating Permit No. AQ0231TVP02.

The Akutan Seafood Processing Facility is a stationary source that processes crab, cod, and pollock into edible products by cleaning and freezing in preparation for shipping. The stationary source is owned and operated by Trident Seafoods Corporation. Trident Seafoods Corporation is the Permittee for the stationary source's operating permit.

PROCESS DESCRIPTION

As provided in the application, the stationary source contains numerous diesel generators, boilers, and a fish meal plant. The stationary source is located near the community of Akutan in the Aleutian Islands. The stationary source is self-sufficient with regards to power generation and all of the processes. The plant unloads raw fish and crab from fishing vessels at its loading dock. The cod is cleaned and salted for shipment. Pollock is cleaned and processed into surimi for shipment. The crab is cleaned and frozen for shipment. Waste from all of these processes is converted to fish meal in the fish meal plant and prepared for shipment.

EMISSION UNIT INVENTORY AND DESCRIPTION

Section 3 of Operating Permit No. AQ0231TVP02 contains Table 1 describing the emission units regulated by the permit. The table is provided for informational and identification purposes only. Specifically, the emission unit rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

Section 2 of Operating Permit No. AQ0231TVP02 contains emission information as provided in the application. A summary of the potential to emit (PTE)[16] and assessable PTE as indicated in the application is shown in the table below.

Table A. Emissions Summary

Pollutant	NOx	CO	PM	SO_2	VOC	Total
Potential Emissions (TPY)	240.0	183.7	13.5	154.1	42.0	633.3
Assessable Emissions (TPY)	240.0	183.7	13.5	154.1	42.0	633.3

The potential to emit was determined from the Construction Permit No. 231CP03 and the maximum emissions from the emission unit inventory of the stationary source as shown in Table 1, Table 2, and Table 3 of Section 3 of Operating Permit No. AQ0231TVP02. The emission

[16] *Potential to Emit or PTE* means the maximum quantity of a release of an air pollutant, considering a stationary source's physical or operational design, based on continual operation of all emission units within the stationary source for 24 hours a day, 365 days a year, reduced by the effect of pollution control equipment and approved state or federal limitations on the capacity of the stationary source's emission units or the stationary source to emit an air pollutant, including limitations such as restrictions on hours or rates of operation and type or amount of material combusted, stored, or processed as defined in AS 46.14.990(21), effective 1/18/97.

factors were derived from a mixture of AP-42, source test data, mass balance calculations, and vendor data. The assessable PTE listed under condition 1.1 is the sum of the emissions of each individual regulated air pollutant for which the stationary source has the potential to emit quantities greater than 10 TPY. The emissions listed in Table A are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit to the stationary source.

BASIS FOR REQUIRING AN OPERATING PERMIT

The Trident Akutan Seafood Processing Facility requires an operating permit because it has the potential to emit 100 tons per year (TPY) or more of a regulated air pollutant as set out by 18 AAC 50.326(a) and 40 C.F.R. 71.3(a)(5). Therefore, the Akutan Seafood Processing Facility meets the definition of operating permit stationary source in the state regulations.

Alaska regulations require operating permit applications to include identification of "regulated emission units." As it applies to this stationary source, the state regulations require a description of:

- ⇒ Each emission unit regulated by a standard in 18 AAC 50.055, Industrial Processes and Fuel Burning Equipment, under 18 AAC 50.326(a);
- ⇒ Each incinerator regulator by a standard in 18 AAC 50.050, Incinerator Standards, under 18 AAC 50.326(a); and
- ⇒ Emission units subject to requirements in an existing Department permit 18 AAC 50.326(a).

The emission units at the Akutan Seafood Processing Facility classified as "regulated sources" according to the above Department regulations are listed in Table 1 of Operating Permit No. AQ0231TVP02.

CURRENT AIR QUALITY PERMITS

Air Quality Permit to Operate History

The Department issued Air Quality Control Permit to Operate No. 9325-AA001 on June 26, 1995. This permit included all construction authorizations issued through June 26, 1995, and was issued before January 18, 1997 (the effective date of the new divided operating and construction-permitting program). All stationary source-specific requirements established in this previous permit are included in the renewal operating permit as described below.

Construction Permit History

The Department issued prevention of significant deterioration (PSD) avoidance Construction Permit No. 9825-AC010 on November 24, 1999; Permit No. 231CP02 on December 9, 2003; and Permit No. 231CP03 (which rescinded Permit No. 231CP02) on January 10, 2005. On May 12, 2005, and September 28, 2005 Trident requested an administrative revision to Permit No. 231CP03 to correct typographical errors. The stationary source-specific requirements established in the PSD avoidance construction permits and administrative revisions 1 and 2 are included in the operating permit as described below.

Initial Title V Operating Permit History

The initial Title V operating permit application was received by the Department on December 5, 1997, and was superseded by the changes allowed in the Construction Permit No. 9825-AC010. The application was deemed incomplete on February 4, 1998, and additional information was received on March 23, 1998. The initial Title V operating permit was issued August 9, 2000 and was based on both the Construction Permit No. 9825-AC010 and Permit to Operate No. 9325-AA001.

Permit No. 231TVP01 Administrative Revision 1 was issued on November 20, 2000 to correct a typographical error. Permit No. 231TVP01 Administrative Revision 2 was issued on December 20, 2002 to update the condition concerning emission fees in the permit to the standard permit condition for emission fees which was adopted by reference into 18 AAC 50 effective May 3, 2002.

On May 2, 2003, Trident requested Revision 3 of the operating permit to incorporate terms and conditions established in Construction Permit No. 231CP03, Revision 1 (with administrative revision request to correct typographical errors submitted on May 12, 2005). On February 7, 2005, Trident requested Revision 4 of the permit to allow an administrative revision for the replacement of Unit ID 23 with a like-in-kind unit (a Cleaver Brooks 21-MMBtu/hr boiler, model CB 189-500, SN L-52745, manufacturer date August 23, 1971, fuel rate 149.5 gal/hr, and maximum pressure 150 psi with a Cleaver Brooks 21-MMBtu/hr boiler, model CB 200-500-150, SN L-62902, manufacturer date April 20, 1977, fuel rate 149.5 gal/hr, maximum pressure 150 psi). On December 5, 2005, the department issued Revision 2 to Construction Permit No. 231CP03 (administrative), to further correct typographical errors in the permit, as request by Trident on September 28, 2005. Operating Permit AQ0231TVP02 incorporates all Construction Permit 231CP03, Revisions 1 and 2 as well as the like-kind replacement of Unit 23.

Renewal Title V Operating Permit History

The owner or operator submitted a renewal Title V operating permit application on February 3, 2005. This application was deemed complete on May 17, 2005.

Minor Revision 1

The department issued the renewal Title V permit without including the updates indicated in the response to comments. The owner appealed the permit, requesting 58 different changes to the permit. The department had already agreed to approximately 45 of those changes in the response to comments and now has included them in this revision. In addition, this revision covers the following changes that the department does not consider significant. The remaining few items from the owner's appeal require changes in a Title I permit that will be reflected in a future administrative revision to this operating permit.

Emission units 10 and 11 are insignificant on an emission rate basis as defined in 18 AAC 50.326(e). This revision now identifies the appropriate monitoring, recordkeeping, and reporting requirements for these emission units. Six conditions were affected by this change.

NO_X source testing conditions 13.1 and 16.5 previously included fuel sulfur testing. This was not consistent with the original requirements from the Title I permit. Removal of these requirements is not a significant reduction in monitoring as routine monitoring for fuel sulfur is covered under other permit conditions.

The department reduced the frequency of sulfur testing for fish oil to an appropriate level based on the department's knowledge of the naturally low sulfur content. The department also removed an unnecessary sulfur calculation for blended fuels.

The department clarified that the requirements for sampling ports and platforms in condition 23.4b only applied to units capable of operating with SCR. This requirement originated with a Title I permit. While the language in the renewal permit was consistent with the Title I permit, the context had changed significantly.

The department removed a condition for one time sludge sampling as the requirement has been met.

The department removed a condition that was an unnecessary restatement of permitting requirements for construction and modification.

COMPLIANCE HISTORY

The Trident Akutan Seafood Processing Facility was constructed and first went into operation in June 1982. The plant processed crab, halibut, turbot, salmon, cod, and pollock into surimi. When the plant was first placed online, it consisted of three Caterpillar D379 diesel generators, fish and crab processing equipment, and two Johnston 516 AC steam boilers. The first plant was severely damaged by fire on June 9, 1983, and was rebuilt in 1984. One additional Caterpillar D3512 diesel engine was added in 1985 and another in 1988. The Pedar Halvorsen furnace was installed in 1988. In 1989 through 1990, there was a plant expansion which included four additional Caterpillar D3512A generators, a fish meal plant, and two Cleaver Brooks Model CB 400 boilers. All of this construction and new equipment additions were performed without obtaining any type of air quality control or PSD permits.

In July 1990, Trident submitted its first application for an air quality control permit to operate for the Akutan Seafood Processing Facility. At that time, the Department determined that the stationary source had added new equipment since the plant had originally started operating. Since the potential to emit for the plant was in excess of 250 tons per year of NOx, the Department informed Trident that a PSD application and permit would be required. In April 1991, a Compliance Order by Consent (COBC No. 91-266-0921) was issued to Trident for their Akutan Seafood Processing operation. Starting in April 1991, the stationary source operated under the compliance order while preparations were being made for the submittal of a PSD application. The COBC imposed fuel limits and required an air permit, meteorological monitoring, heat recovery system, and fuel feasibility study. The COBC also required Trident to halt operation of the Cleaver Brooks boilers until permit issuance. It was later determined that only operation of one boiler was ceased, no heat recovery system was installed, and no fuel feasibility study was conducted.

By April 1994, Trident decided against PSD and submitted a PSD avoidance application. The application requested a permit to operate the stationary source with operational limits to keep the potential emissions of NOx below 250 tons per year. In May 1994, a Caterpillar D3516B 1,655 kW diesel generator was installed. On June 26, 1995, Air Quality Control Permit to Operate No. 9325-AA001 was issued with limits on fuel consumption and fuel sulfur content to avoid PSD and to comply with the ambient air quality standards. On August 2, 1995, the Department issued Permit No. 9325-AA001 Amendment 1 for installation of another boiler; on August 23, 1995, the Department issued Permit No. 9325-AA001 Amendment 2 for modifications of ambient air

quality signs; on April 3, 1996, the Department issued Permit No. 9325-AA001 Amendment 3 for burning of used oil in specific boilers.

In October 1996, a Cleaver Brooks CB500 steam boiler was installed. Again there was no construction or PSD permit involved. On January 7, 1997, the Department issued Permit No. 9325-AA001 Amendment 4 for installation of an electric generator. In September 1997, a construction permit application was submitted to increase the amount of fuel allowed to be burned at the stationary source and to increase the sulfur content of the fuel burned. During the process of evaluating this permit application, additional changes were made to the diesel-electric generators at the stationary source by converting three of the six Caterpillar D3512A engines into low NOx emitting ("B" series) engines and adding a Caterpillar D3508B compressor engine. All of these changes were incorporated into the Construction Permit No. 9825-AC010 issued on November 24, 1999. This construction permit allowed the increase in fuel and fuel sulfur content while still maintaining PSD avoidance by keeping NOx emissions below the 250 tons per year threshold.

Between November 1999 and August 2000 (issuance of initial Title V permit), Trident operated under the construction permit and operating permit application shield. During that period, Trident made several changes to the diesel-electric generators at the stationary source by converting the engines into low NOx emitting units. From COBC signing until operating permit issuance, Trident Akutan received numerous notices of violations and warning letters from the Department regarding exceedances of fuel and NOx limits, exceedances of fuel sulfur content, high opacity incidents, and installing equipment prior to notification.

On December 5, 2002, Trident and the Department entered into Consent Decree No. 1JU-02-1073C1. The consent decree was filed in Alaska court on December 13, 2002 and is in effect until August 31, 2005. The consent decree was a result of the Department two notices of violations (NOV No. 01-324-40-1958 on July 25, 2001 and NOV No. 01-470-40-2018 on October 10, 2001) and was based on the determination that Trident had violated Operating Permit No. 231TVP01, Construction Permit No. 9825-AC010, and Permit to Operate No. 9325-AA001.

The consent decree listed several remedial measures including installation of selective catalytic reduction to control NOx emissions and submittal of a construction permit application, both of which have been fulfilled. All remedial measures required by the consent decree have been completed, although the consent decree remains open until August 31, 2005.

STATIONARY SOURCE-SPECIFIC REQUIREMENTS CARRIED FORWARD

Tables B and C below lists the old requirement (condition) and the new condition that carries over the old requirement into the new permit.

Table B. A Comparison of Permit No. 9325-AA001 Conditions to Permit No. AQ0231TVP02 Conditions.

Permit No. 9325-AA001 Conditions	Description of Requirement	Permit No. 231TVP01 Conditions	How Condition was Revised	Permit No. AQ0231TVP02 Conditions	How Condition was Revised
Introductory paragraph and Exhibit A	Authority for permit and unit list	Section 2 Table 1	same information, different format	Section 3 Table 1, SOB	Same as Permit No. 231TVP01

Permit No. 9325-AA001 Conditions	Description of Requirement	Permit No. 231TVP01 Conditions	How Condition was Revised	Permit No. AQ0231TVP02 Conditions	How Condition was Revised
1	comply with ambient air quality standards	27	now required only for construction permits	NA	deleted
2 and Exhibit B	comply with most stringent emission standards, limits, & specifications	14	emission limits unchanged and now listed as condition	Section 5	Revised per Construction Permit No. 231CP03
1	Make no modifications without notification	27	now required only for construction permits	NA	deleted
16	Warning Signs Required	15	Not revised; carried over	21	Same as Permit No. 231TVP01
5	Source Testing for Diesel Electric Generators	16	Added requirement to adjust emission factors depending on test results and temporary kW restriction until tests can be performed.	NA	Deleted – requirement met
4	Burning of Used Oil	12, 13	Language revised and standardized for clarity	12	Revised per Construction Permit No. 231CP03
12	Installation, maintenance and operation of process monitoring equipment	18, 19	Requirements carried over from previous operating permit largely intact	14 and Section 5	Revised per Construction Permit No. 231CP03

Table C. A Comparison of Permit No. 9825-AC010 Conditions to Permit No. AQ0231TVP02 Conditions.

Permit No. 9825-AC010 Conditions	Description of Requirement	Permit No. 231TVP01 Conditions	How Condition was Revised	Permit No. AQ0231TVP02 Conditions	How Condition was Revised
14	PSD Avoidance limits for NOx	14	Not revised; carried over	Section 5	Revised per Construction Permit No. 231CP03
16	Fuel Sulfur limit of 0.39%	5.1	Not revised; carried over	Section 5	Revised per Construction Permit No. 231CP03

In addition, the department has incorporated each term and condition of Construction Permit No. 231CP03, Revision 2 (condition 1 through 15) into renewal Permit No. AQ0231TVP02.

LEGAL AND FACTUAL BASIS FOR THE PERMIT CONDITIONS

The state and federal regulations for each condition are cited in Operating Permit No. AQ0231TVP02.

Conditions 1 - 2, Emission Fees

Applicability: The regulations require all permits to include due dates for the payment of fees and any method the Permittee may use to re-compute assessable emissions.

Factual Basis: These standard conditions require the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date.

The default assessable emissions are emissions of each air pollutant authorized by the permit (AS 46.14.250(h)(1)(A)). Air pollutant means any regulated air pollutant and any hazardous air pollutant. Therefore, assessable emissions under AS 46.14.250(h)(1)(A) means the **potential** to emit any air pollutant identified in the permit, including those not specifically limited by the permit. For example, hydrogen chloride (HCl) emissions from an incinerator are assessable emissions because they are a hazardous air pollutant, even if there is currently no emission limit on HCl for that class of incinerator.

The conditions also describe how the Permittee may calculate **actual** annual assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1)(B), assessable emissions are based on each air pollutant. Therefore, fees based on actual emissions must also be paid on any pollutant emitted whether or not the permit contains any limitation of that pollutant.

This standard condition specifies that, unless otherwise approved by the Department, calculations of assessable emission based on actual emissions use the most recent previous calendar year's emissions. Since each current year's assessable emission are based on the previous year, the Department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match. The Permittee will normally pay for actual emissions - just with a one-year time lag.

Projected actual emissions may differ from the previous year's actual emissions if there is a change at the stationary source, such as changes in equipment or an emission rate from existing equipment.

If the Permittee does not choose to annually calculate assessable emissions, emissions fees will be based on PTE.

The PTE set forth in the condition is based on liquid fuel with a sulfur content of 0.35 percent by weight for all units except the incinerator at 0.5 percent. The PTE for assessable emissions will decrease as engines are added to the stationary source per condition 22.5. If the actual sulfur content of the fuel is greater than these assumptions, the assessable emissions calculations provided by the Permittee should reflect the actual sulfur content. The change in these values may result in SO_2 emissions that could trigger a permit review.

Conditions 3 - 5, Emission Unit Modification and Installation Authorizations

Applicability: These conditions are carried over from Construction Permit No. 231CP03 Revision 2.

Factual Basis: Condition 3 authorizes the stationary source to upgrade or replace Unit IDs 6, 7a, 28, and 29 with Unit IDs 6a, 7b, 28a, and 29a. Condition 4 authorizes the stationary source to install Unit IDs 25a, 31, 32, 33, and 34. The modifications and installations must be done in accordance with condition 23.5 (requiring stack modification and lower fuel sulfur use). In addition, notification must be submitted to the Department's Fairbanks Office.

Condition 5 authorizes the stationary source to use SCR to control NOx emissions. Additional SCR units can be installed at Trident's discretion.

Condition 6 and Section 12, Visible Emission Standard

Applicability: The regulation applies to operation of all fuel-burning equipment and industrial process equipment in Alaska.

Factual Basis: The condition re-iterates federal and state opacity standards applicable to fuel-burning equipment and industrial process equipment. The Permittee shall not cause or allow their equipment to violate these standards.

The monitoring, recordkeeping, and reporting requirements for significant emission units are listed in Section 12 of the permit, as recently adopted into regulation. The monitoring, recordkeeping, and reporting requirements for insignificant emission units are listed in Section 6.

For liquid fired emission units, visible emissions may be observed by either Method-9 or the Smoke/No Smoke plans as detailed in Section 12. Corrective actions such as maintenance procedures and either more frequent or less frequent testing may be required depending on the results of the observations.

The Permittee is required to record the results of all visible emission observations and record any actions taken to reduce visible emissions.

The Permittee is required to report: 1) emission in excess of federal and state visible emission standard and 2) deviations from permit conditions. The Permittee is required to include copies of the results of all visible emission observations with the Operating Report.

Condition 7 and Section 12, PM Standard

Applicability: The PM standard applies to operation of all fuel burning equipment and industrial process equipment in Alaska.

Factual Basis: The condition requires the Permittee to comply with the state PM (also called grain loading) standard applicable to fuel burning and industrial process equipment. The Permittee may not cause or allow their equipment to violate this standard.

The monitoring, recordkeeping, and reporting requirements for significant emission units are listed in Section 12 of the permit, as recently adopted into regulation. The monitoring, recordkeeping, and reporting requirements for insignificant emission units are listed in Section 6.

For diesel engines, the Permittee is required to conduct PM source testing if threshold values for opacity are exceeded as set out by Section 12. The Permittee is required to record the results of PM source tests.

The Permittee is required to report: 1) incidents when emissions in excess of the opacity threshold values have been observed, and 2) results of PM source tests. The Permittee is required to include copies of the results of all visible emission observations with the Operating Report.

Condition 8, Sulfur Compound Emission Standard

Applicability: The condition applies to operation of all fuel burning equipment and industrial process equipment in Alaska.

Factual Basis: The condition re-iterates a sulfur emission standard applicable to fuel-burning equipment. The Permittee may not cause or allow their equipment to violate this standard.

Sulfur dioxide comes from the sulfur in the liquid, hydrocarbon fuel (e.g. diesel or No. 2 fuel oil). Fuel containing no more than 0.75 percent sulfur by weight will always comply with the emission standard.

The Department did not impose the standard condition because Construction Permit No. 231CP03 had more restrictive limits, monitoring, recording, and reporting requirements for PSD avoidance. The fuel burning equipments and industrial processes shall use fuel with a sulfur content of no greater than 0.35 percent by weight, which will be reduced upon installation of replacements units.

For semi-annual operating reports, records of the fuel sulfur content are needed, as well as reporting excess emissions.

Condition 9, Incinerator Standards

Applicability: The regulation applies to operation of incinerators in Alaska.

Factual Basis: The stationary source contains an incinerator with a charging rate of 750 lb of trash per hour. Because the charging rate is less than 1000 lb per hour, the only requirement for this incinerator is the visible emission standard. The particulate matter standards in 18 AAC 50.050(b) Table 4 do not apply to this incinerator. The Permittee may not cause or allow the affected incinerator to violate this standard.

Rather than impose emission unit specific monitoring, recording and reporting, the Department is imposing the requirements of Section 12.

Condition 10, Standards of Performance for Commercial and Industrial Solid Waste Incinerators

Applicability: These requirements apply to incinerators constructed after November 30, 1999 that burn commercial and industrial waste.

Factual Basis: The incinerator is exempt from this subpart because it is a municipal waste combustor that burns greater than 30 percent municipal solid waste or refuse-derived fuel and has the capacity to burn less than 35 tons per day of municipal solid waste or refuse-derived fuel. With this exemption, the stationary source notified EPA that the unit meets these

criteria and keeps records on a calendar quarter basis of the weight of municipal solid waste burned, and the weight of all other fuel and waste burned in the unit. This recordkeeping requirement does not have to be imposed by an operating permit, but was carried over from Construction Permit No. 231CP03.

Condition 11, National Emission Standard for Mercury

Applicability: These requirements apply to emission units that incinerate or dry wastewater treatment plant sludge.

Factual Basis: The incinerator is subject to this subpart because it incinerates wastewater treatment plant sludge. The subpart requires the stationary source to test for mercury using a stack test method or sludge sampling method. On February 5, 2005, Trident submitted to EPA a 30-day notification required under 40 C.F.R. 61.54(b) of Trident's intent to conduct sludge sampling for mercury. The sampling took place during an effective 24-hour period on March 17-28, 2005, in accordance with EPA Method 105 procedures (sludge testing) of Appendix B of 40 C.F.R. 61. Mercury emissions were found to be 0.00012 kg/day, which is below the standard of 3.2 kg/day, and less than the threshold that would require further monitoring. The sampling results and calculations were submitted to EPA and the Department on April 7, 2005. Thus, no further sludge sampling or stack testing is required.

Condition 12, Used Oil

Applicability: If the Permittee burns used oil in its boilers and heaters, then these requirements apply. This condition is carried over from Construction Permit No. 231CP03.

Factual Basis: This condition specifies requirements for burning used oil at the stationary source in only boilers and heaters. The Permittee shall remember that used oil is fuel that is limited and monitored as set out by condition 12. In addition, although this condition should ensure compliance with the applicable emission standards of 18 AAC 50, this permit does NOT ensure compliance with other applicable state or federal laws concerning management, use, or disposal of used oil.

The permit lists blending, testing, recording, and reporting requirements. The Department imposed a requirement to blend at a ratio of no more than 1 part used oil with 6 parts virgin oil to comply with the particulate matter standard. However, the Permittee must still test for sulfur and ensure that the ratio of used oil with comply with the sulfur limit.

Condition 13, Fish Oil

Applicability: If the Permittee burns fish oil in the engines, then these requirements apply. This condition is carried over from Construction Permit No. 231CP03.

Factual Basis: The Department recognizes some positive aspects of blended fish oil/fuel oil combustion such as the reduction in environmental risk from transporting fuel to the Plant and lower sulfur compound emissions from fish oil. However, because blended fish oil/fuel oil combustion in engines may increase NOx emissions, the Department has imposed the requirement to source test prior to use.

Because Trident has not conducted mapping for fish oil use in SCR equipped engines and did not provide vendor data or approvals for the use of fish oil with SCR-equipped engines, the

Department has concerns that fish oil use in SCR-equipped engines may void any vendor emission and performance guarantees, cause fouling and mask the SCR catalyst beds. Therefore, the permit requires Trident to provide assurance to the Department that fish oil/fuel oil blend will not cause or contribute to an accelerated decrease of SCR performance.

The Department notes potential for increased preventive maintenance, or absent increased maintenance, potential for engine smoke from worn injectors in non-SCR-equipped engines. However, the Department has no air quality control rationale to restrict or prohibit use of blended fuel oils in non-SCR-equipped engines. Therefore, the Department authorizes the use of blends contingent upon Department-approved emission source tests to determine the actual emission factors for each make and model of non-SCR-equipped engines.

Condition 14, Scrubber Process Monitoring

Applicability: This condition is carried over from Permit to Operate No. 9325-AA001.

Factual Basis: These are two requirements carried over from the previous permit to operate. They require the Permittee to monitor and report the hours of operation and fuel consumption for the fish meal dryer (Unit ID 12) and physically verify and record that the seawater pumps are operating prior to startup of the fishmeal plant dryer and while the fish meal plant is operated.

Condition 15, Environmental Management Plan

Applicability: This condition is carried over from Construction Permit No. 231CP03 and Consent Decree No. 1JU-02-1073C1.

Factual Basis: This condition ensures that the Permittee has an environmental management plan to manage air quality permitting requirements and regulations.

Condition 16, NOx PSD Avoidance

Applicability: This condition is carried over from Construction Permit No. 231CP03 to avoid classification as PSD.

Factual Basis: The permit imposed a 240 TPY limit on NOx emissions to avoid being classified as a PSD major stationary source. Emissions of NOx are limited by the installation of SCR technology as well as through operational limits. The construction permit imposed monitoring of fuel consumption, hours of operation, and load to calculate NOx emissions. The condition requires calculation of emission on a monthly and 12-month rolling total basis to determine compliance with this requirement. The permit also imposes a source testing requirement if NOx emissions exceed 235 TPY.

Condition 17, SCR Requirements

Applicability: This condition is carried over from Construction Permit No. 231CP03.

Factual Basis: The permit imposed a 240 TPY limit on NOx emissions to avoid being classified as a PSD major stationary source. Emissions of NOx are limited by the installation of SCR technology as well as through operational limits. Each SCR system shall be installed and operated in accordance with the Department-approved SCR Operating System QA/QC Plan, including having spare catalyst bed, and spare parts. The SCR NOx removal

effectiveness is determined using a hand-held analyzer at least every seven operating days. If NOx emissions exceed 230 TPY, the hand-help analyzer shall be used on a daily basis.

Condition 18, Engine Exhaust NOx Analyzer

Applicability: This condition is carried over from Construction Permit No. 231CP03.

Factual Basis: The permit imposed a 240 TPY limit on NOx emissions to avoid being classified as a PSD major stationary source. Emissions of NOx are limited by the installation of SCR technology as well as through operational limits. The SCR NOx removal effectiveness is determined using a hand-held analyzer. The hand-held analyzer shall be installed and operated in accordance with the Department-approved NOx Monitoring System QA/QC Plan. In addition, the analyzer relative accuracy will be determined before each use.

Condition 19, SO_2 PSD Avoidance

Applicability: This condition is carried over from Construction Permit No. 231CP03 to avoid classification as PSD.

Factual Basis: The stationary source shall emit less than 250 TPY of SO_2 emissions to avoid being classified as a PSD major stationary source. The condition requires calculation of emission on a monthly and 12-month rolling total basis to determine compliance with this requirement.

Condition 20, General Ambient Air Quality Provisions

Applicability: This condition is carried over from Construction Permit No. 231CP03 to protect ambient air quality for NO_2, SO_2, and PM-10.

Factual Basis: The permit requires that the stationary source operate in accordance with the public access control plan, including the ambient air quality boundary. Trident shall not change the boundary of the controlled area without Department approval.

Condition 21, Warning Signs

Applicability: This condition is carried over from Permit to Operate No. 9325-AA001.

Factual Basis: This condition requires that the stationary source post signs at the entrance to the property advising that there may be occasional exceedances of air quality standards on the property. This measure was put in place when air dispersion modeling showed that the stationary source was operating very close to the ambient air quality standards for SO_2 when using an ambient boundary of two boat widths from the dock. Trident has not shown compliance with ambient standards and increments for the area between the dock and the ambient boundary.

Condition 22, NO_2 Ambient Air Quality Protection

Applicability: This condition is carried over from Construction Permit No. 231CP03 to protect ambient air quality for NO_2.

Factual Basis: The permit requires that the stationary source operate in accordance with the terms and conditions established for NOx PSD avoidance limits, general ambient air quality provisions, and stack heights requirements imposed in the SO_2 Ambient Air Quality Protection condition.

Condition 23, SO_2 Ambient Air Quality Protection

Applicability: This condition is carried over from Construction Permit No. 231CP03 to protect ambient air quality for SO_2.

Factual Basis: The permit requires that the stationary source operate in accordance with the terms and conditions established for general ambient air quality provisions, as well as the established stack heights, fuel sulfur, and concurrent operation requirements.

Condition 24, PM-10 Ambient Air Quality Protection

Applicability: This condition is carried over from Construction Permit No. 231CP03 to protect ambient air quality for PM-10.

Factual Basis: The permit requires that the stationary source operate in accordance with the terms and conditions established for general ambient air quality provisions, as well as the stack heights requirements and concurrent operation restrictions imposed in the SO_2 Ambient Air Quality Protection condition.

Conditions 25 - 28, Insignificant Emission Units

Applicability: These general emission standards apply to all industrial processes fuel-burning equipment, and incinerators regardless of size.

Factual Basis: The conditions re-iterate the general standards and require compliance for insignificant emission units. The Permittee may not cause or allow their equipment to violate these standards. Insignificant emission units are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

The Department finds that the insignificant emission units at this stationary source do not need specific monitoring, recordkeeping and reporting to ensure compliance under these conditions.

Condition 25 requires certification that the emission units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution. State air quality regulations adopted effective May 3, 2002, allow for an average six minute opacity observation. The existing regulation, limiting opacity to no more than 20 percent for more than 3 minutes in any one hour, is included because EPA Region X has not formally approved the changed opacity regulation as part of Alaska's State Implementation Plan (SIP).

Condition 29, Asbestos NESHAP

Applicability: If the Permittee engages in asbestos demolition and renovation, then these requirements may apply.

Factual Basis: The condition cites and requires compliance with the regulations that will apply if the Permittee engages in asbestos demolition or renovation. Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient.

Condition 30, Refrigerant Recycling and Disposal

Applicability: This condition applies to Permittees that engage in recycling or disposal of certain refrigerants.

Factual Basis: The condition cites and requires compliance with the regulations that apply to Permittees that own appliances that contain or use a refrigerant. Because these regulations include adequate monitoring and reporting requirements, simply citing the regulatory requirements is sufficient.

Condition 31, Good Air Pollution Control Practices

Applicability: Applies to all emission units.

Factual Basis: The condition requires the Permittee to comply with good air pollution control practices for all emission units.

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the Department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that maintenance has been deferred.

Condition 32, Dilution

Applicability: Applies to the Permittee because the Permittee must comply with emission standards in 18 AAC 50.

Factual Basis: The requirement prohibits diluting emissions as a means of compliance. In practical terms, dilution only affects compliance when the emissions are being measured. Therefore, the monitoring is limited to immediately before source testing.

Dilution can occur by design or by leaks in the exhaust ductwork. Intentional dilution is not expected to be a problem, as it would increase operating costs by increasing induced draft fan power requirements. Careful review of source test plans and operating conditions will prevent intentional dilution. Therefore, only leaks need to be monitored under this condition.

The monitoring adequately prevents dilution by requiring leaks to be repaired before compliance with the emission standards is measured.

Condition 33, Reasonable Precautions to Prevent Fugitive Dust

Applicability: Bulk material handling requirements apply to the Permittee because the Permittee may engage in bulk material handling, transporting, or storing; or may engage in industrial activity at the stationary source.

Factual Basis: The underlying regulation, 18 AAC 50.045(d), requires the Permittee to take reasonable action to prevent PM from being emitted into the ambient air.

Condition 34, Stack Injection

Applicability: Applies to the stationary source because the stationary source contains a stack or source modified after November 1, 1982.

Factual Basis: The condition restates the prohibition on stack injection (i.e. disposing of material by injecting it into a stack.) No specific monitoring for this condition is practical. Compliance is ensured by inspections, because the emission unit or stack would need to be modified to accommodate stack injection.

Condition 35, Open Burning

Applicability: These conditions apply if the Permittee conducts open burning at the stationary source.

Factual Basis: The condition requires the Permittee to comply with the regulatory requirements when conducting open burning at the stationary source.

The permit does require the Permittee to keep "sufficient records" to demonstrate compliance with the standards for conducting open burning, but does not specify what these records should contain.

Additional monitoring is achieved through condition 36, which requires a record of complaints. Therefore, the Department does not believe that additional monitoring is warranted.

The Department did not include conditions on controlled burning or fire training because the stationary source does not conduct those types of burns.

Condition 36, Air Pollution Prohibited

Applicability: Air Pollution Prohibited requirements apply to the stationary source because the stationary source will have emissions.

Factual Basis: The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. While the other permit conditions and emissions limitation should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

The Permittee is required to report any complaints and injurious emissions. The Permittee must keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for these complaints and to submit copies of these records upon request of the Department.

The Department will determine whether the necessary actions were taken. No corrective actions are necessary if the complaint is frivolous or there is not a violation of 18 AAC 50.110, however this condition is intended to prevent the Permittee from prejudging that complaints are invalid.

Condition 37, Technology-Based Emission Standards

Applicability: Technology Based Emission Standard requirements apply to the stationary source because the stationary source contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or other "technologically feasible" determinations.

Factual Basis: The Permittee is required to take reasonable steps to minimize emissions if certain activity causes an exceedance of any technology-based emission standard in this permit. The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with condition 52. Excess emission reporting under condition 52 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under condition 52.

Condition 38, Permit Renewal

Applicability: Applies if the Permittee intends to renew the permit.

Factual Basis: The condition restates the regulatory deadlines, citing the specific dates applicable to the stationary source. Submittal of the renewal application is sufficient monitoring, recordkeeping and reporting.

Condition 39 , Requested Source Tests

Applicability: Standard condition to be included in all permits.

Factual Basis: Condition requires the Permittee to conduct source tests as requested by the Department, therefore no monitoring is needed. Conducting the requested source test is its own monitoring.

Conditions 40 - 42, Operating Conditions, Reference Test Methods, Excess Air Requirements

Applicability: Apply because the Permittee is required to conduct source tests by this permit.

Factual Basis: The Permittee is required to conduct source test as set out in conditions 40 through 42. These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with conditions 40 through 42 consist of the test reports required by condition 47.

Condition 43, Test Exemption

Applicability: Applies when the emission unit exhaust is observed for visible emissions.

Factual Basis: As provided in 18 AAC 50.345(a), the requirements for test plans, notifications and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

Conditions 44 - 47, Test Deadline Extension, Test Plans, Notifications and Reports

Applicability: Apply because the Permittee is required to conduct source test by this permit.

Factual Basis: Standard conditions 18 AAC 50.345(l) - (o) are incorporated through these conditions. These standard conditions supplement specific monitoring requirements stated elsewhere in this permit. The source test itself monitors compliance with this condition.

Condition 48, Certification

Applicability: Applies because the permit requires the Permittee to submit reports, and because the condition is a standard condition.

Factual Basis: This condition restates the regulatory requirement that all reports must be certified. To ease the certification burden, the condition allows the excess emission reports to be certified with the semi-annual Operating Report, although the excess emission reports must be submitted more frequently. This condition supplements the reporting requirements of the permit and no monitoring, recordkeeping or reporting for this condition is needed.

Condition 49, Submittals

Applicability: Applies because the Permittee is required to send reports to the Department.

Factual Basis: This condition merely specifies where submittals to the Department should be sent. Receipt of the submittal at the correct Department office is sufficient monitoring for this condition. This condition supplements the reporting requirements of the permit and no monitoring, recordkeeping or reporting for this condition is needed.

Condition 50, Information Requests

Applicability: Applies to all Permittees, and incorporates a standard condition.

Factual Basis: Incorporates a standard condition in regulation, which tells the Permittee to submit information requested by the Department. Receipt of the requested information is adequate monitoring.

Condition 51, Recordkeeping Requirements

Applicability: Applies to records required by a permit.

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide adequate evidence of compliance with this requirement, therefore, no additional monitoring, recordkeeping or reporting is required.

Condition 52, Excess Emission and Permit Deviation Reports

Applicability: Applies when the emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions - the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The reports themselves and the other monitoring records required under this permit provide monitoring of whether the Permittee has complied with the condition. Please note that there may be additional federally required excess emission reporting requirements.

Condition 53, Operating Reports

Applicability: Applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit. The reports themselves provide monitoring for compliance with this condition.

Condition 54, Annual Compliance Certifications

Applicability: Applies to all Permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. Because this requirement is a report, no monitoring, recordkeeping or reporting is needed.

Conditions 55 - 65, Standard Conditions

Applicability: Applies to all operating permits.

Factual Basis: These are standard conditions required for all operating permits.

Conditions 66 and 67, Permit Shield

Applicability Applies because the Permittee has requested a shield for the applicable requirements listed under this condition.

Factual Basis: Table 7 of Operating Permit No. AQ0231TVP02 shows the permit shields that the Department granted to the Permittee. The permit conditions set forth the requirements that the Department determined were not applicable to the stationary source.